

HYDROTHERAPEUTICS,

OR,

A TREATISE

ON

THE WATER CURE;

BEING

A DIGEST OF THE OPINIONS AND EXPERIENCE OF SOME OF THE MOST
DISTINGUISHED PHYSICIANS IN EUROPE AND AMERICA,

ON

The Curative Virtues of Water.

TO WHICH ARE ADDED

THE HONORARY ACKNOWLEDGMENTS OF A FEW INFLUENTIAL PATIENTS, IN
TESTIMONY FOR BENEFIT DERIVED FROM ITS USE, WHEN
EVERY OTHER MEANS HAD FAILED.

ALSO,

SOME PRACTICAL REMARKS ON

TYPHUS, SHIP OR EMIGRANT FEVER,

AS IT OCCURRED IN THIS PROVINCE; WITH OBSERVATIONS ON THE BEST
MEANS OF PREVENTION AND CURE.

BY

ROBERT HUNTER, M.D.

"He told the hidden powers of springs,
And Disease drank and slept."

SHELLEY

TORONTO:

HENRY ROWSELL,

KING STREET.

Secret

HYD

TH

A DIGEST OF THE
DISTING

THE VOLUNTARY
GRATIT

TYPH
AS IT OCCUR

R

Secretion Sarsaparilla

HYDROTHERAPEUTICS,

OR,

A TREATISE

ON

THE WATER CURE;

BEING

A DIGEST OF THE OPINIONS AND EXPERIENCE OF SOME OF THE MOST
DISTINGUISHED PHYSICIANS IN EUROPE AND AMERICA,

ON

The Curative Virtues of Water.

TO WHICH ARE ADDED

THE VOLUNTARY ACKNOWLEDGMENTS OF A FEW INFLUENTIAL PATIENTS, IN
GRATITUDE FOR BENEFIT DERIVED FROM ITS USE, WHEN
EVERY OTHER MEANS HAD FAILED.

ALSO,

SOME PRACTICAL REMARKS ON

TYPHUS, SHIP OR EMIGRANT FEVER,

AS IT OCCURRED IN THIS PROVINCE; WITH OBSERVATIONS ON THE BEST
MEANS OF PREVENTION AND CURE.

BY

ROBERT HUNTER, M.D.

"He told the hidden powers of springs,
And Disease drank and slept."

SHELLEY.

TORONTO:

HENRY ROWSELL.

KING STREET.

H

" We ransack
potions from the
great mother,
Wherever the sun
the vast proportion
benignant healing

IT seems a moment of disease
profession, if
that its claims
surprise is so
neglect to other
viz., a want of
scope to the in
of the minds w
can never dist
it possesses v
power of allev
attractive to
Greece or Rom
profession, and
indeed been m
engulphed it ;
and many other
midnight of ig
and it sunk ag
to its present
who entered c
nothing could
the threatened
the walls of a
renounce a p
contrary, he l
name that wil
be approved
fame to which

HYDROTHERAPEUTICS.

"We ransack the ends of the earth for drugs and minerals—we extract our potions from the deadliest poisons—but around us and about us, nature, the great mother, proffers the hygeian fount, unsealed and accessible to all. Wherever the stream glides pure, wherever the spring sparkles fresh, there, for the vast proportion of the maladies which art produces, nature yields the benignant healing."

BULWER.

IT seems a matter of great surprise, that the use of water in the treatment of disease should have been so long neglected by the medical profession, if it really possesses any virtue; though when we remember that its claims have never until of late been thoroughly investigated, our surprise is somewhat diminished, and we feel inclined to ascribe this neglect to other causes than the one generally alleged by medical men, viz., a want of power. It possesses not the charm of novelty, gives little scope to the imagination of the lovers of theory, and to the wild fantasies of the minds which delight to soar where the light of analytic investigation can never disturb their repose. But if it has not those imaginary goods, it possesses what is of far greater value to suffering humanity—the power of alleviating disease. The simplicity of the "Water Cure" is less attractive to the seekers after fame than the mystic lore of ancient Greece or Rome, therefore it has been too long neglected by the medical profession, and its beauties left undeveloped. A few feeble attempts have indeed been made to rear its head above the dark waves of error which engulfed it; but the efforts of a Sir John Floyer, a Marcard, a Currie, and many others equally distinguished—like the struggle of science in that midnight of ignorance and superstition, the dark ages—proved ineffectual, and it sunk again into oblivion. The honour of bringing the Water Cure to its present perfection, is justly due to Priessnitz, a Silesian peasant, who entered on a train of experiments with zeal and perseverance which nothing could overcome. The angry thunders of the medical profession, the threatened penalty of the law, and even actual incarceration within the walls of a prison, failed to subdue his noble spirit, or induce him to renounce a practice which he believed it his duty to follow. On the contrary, he bore up under persecution until he gained a victory and a name that will be venerated in the annals of history as long as virtue shall be approved and rewarded. This man now sits upon the pinnacle of fame to which his own efforts have elevated him, and numbers among his

votaries, kings, princes, and the most honourable of the earth; and has lived to see the remedial virtues of water recognized and supported alike by the learned and the unlearned, the wealthy and the influential classes of his own and of other lands.

During one year, no less than 2603 persons subjected themselves to hydropathic treatment at Gräfenberg and its vicinity, of whom above 800 were from the higher classes of society, as will be seen from the following extract from the "Bathing List"—1 Royal Highness, 1 Duke, 1 Duchess, 22 Princes and Princesses, 149 Counts and Countesses, 88 Barons and Baronesses, 14 Generals, 53 Officers of the Staff, 196 Captains and Subaltern Officers, 104 high and low Civil Officers, 65 Divines, 46 Artists, and 87 *Physicians*, experienced the curative efficacy of the treatment, and spread the fame of its discoverer to every part of the Old World, casting at the same time a few feeble sparks across the broad Atlantic, to struggle into existence in the New.

The Old World, then, has become awakened to the importance of the subject. Already have many of the most distinguished English physicians and surgeons given it their confidence and support. The governments of France, Prussia and Austria, have extended to it the protection of authority. Medical committees have been appointed to investigate its merits, and much against their inclination, have been compelled by the force of truth to report favourably of it; and medical societies, for its further investigation and spread, are already formed throughout Europe. Are we, then, to do nothing in the matter? or is a little learned bigotry among us to scowl down the opinions of the world, and trample under foot the best interests of the mass? No; I cannot for a moment believe the people of Canada will endure it, and should think meanly of my countrymen if they would submit to be the votaries of darkness and error, while the simplicity of light and truth is open to them. It is high time that the medical profession was purged from that dark mysticism which obscures its otherwise noble principles, which, when rightly understood have no other object than the investigation of truth, for the purpose of relieving human misery.

It is now a little more than three years since my attention was first directed to the Water Cure. I was then a student at the University of New York, and had frequent opportunities of witnessing the comparative curative powers of *medicine* and *water*. The former, in probably the best regulated hospital in America, under the skilful direction of justly distinguished physicians and surgeons; and the latter, under the direction of a very clever, though comparatively speaking less eminent physician. I have seen those restored to health in a few weeks, by the agency of water alone, who had spent months within the walls of the hospital without deriving the least benefit, and who had gone forth pronounced incurable by the congregated wisdom of the faculty. By the same power I have seen broken-down constitutions, from excesses in living and vicious indulgences, restored almost to their wonted strength. The meagre form and wan countenance of the scrofulous subject, lost in the fully developed muscular buoyancy of health; vertigo, ringing in the ears, flushed coun-

tenance and partial insensibility, indicating the premonitory stage of apoplexy, subdued in a few hours; and the subject of a confirmed case of apoplexy, awoken, as though from the sleep of death; dangerous internal hemorrhages stayed in their onset; typhus fever cut short within the first three days of its duration; and the ravings of the inebriate and the maniac lulled into quiescence, as though by the spell of magic. And shall any man after this tell me, that the remedy is powerless, or that it is not capable of producing the most important curative results?

Many members of the medical profession, jealous of the rising popularity of this new practice, have already attempted to bring it into disrepute; and have endeavoured, by every means within their power, to affix the stain of empiricism upon the character of its advocates. Such efforts, futile in effect, must have arisen from an ignorance of that which they so unjustly criticise, or an unwillingness to acknowledge merit in others which they do not possess themselves. But the learned may pour forth their eloquence in opposition to Hydropathy, and ingeniously disguise the sophisms of allopathy; the ignorant promulgate their stupid dogmas; wit exhaust her satire; bigotry and self-conceit affect a contempt for that which they do not understand; and self-interest link together the combined energies of the whole; yet they will not prevail, even though the thunder of their eloquence awaken those passions in our nature which should for ever remain dormant—though the brilliancy and point of their wit should dazzle as the lightning's flash, or pierce deeply the tender sensibilities of our nature, or though their insuperable self-conceit and vanity should equal that of the fabled frog. Still, firm as the ocean cliff amid the raging billows, the advocates of Hydropathy will stand immovable upon their foundations of truth and nature, and smile with derision on the puerile efforts of their enemies. We seek not to awaken your passions or to dazzle your understanding—to wound your sensibilities or to flatter your vanity, but we appeal to that reason which is given for the government of your actions. We ask you to scrutinize in candour our pretensions, and to pronounce their doom. If they do not meet your approbation, we ask you not to receive them; but if they be founded upon the rock of sound philosophy, proved and supported by experience, then we claim as a right your cordial support and protection.

Yet let it not be supposed, that while advocating the just merits of water, the author of these pages would claim for it an universal application, or denounce everything else as dangerous or insufficient in the cure of disease. On the contrary, he has too often witnessed the valuable efficacy of other agents, when timely and judiciously administered; and it is and ever has been his practice to avail himself of every aid, in the restoration of health, which an enlightened experience has sanctioned and approved. With the honourable and enlightened members of the profession, therefore, he can have no controversy. They are too sensible of the deep responsibility and of the great imperfection of the means at present at their disposal for combating disease, and must hail with pleasure every addition to those means which experience shall

prove capable of diminishing the sum of human misery. The department of Therapeutics is confessedly the reproach of medicine. This has arisen from the exclusive devotion of the most able members of the profession to the study of anatomy, pathology, chemistry, physiology, diagnosis, prognosis, &c., while to Therapeutics the light of philosophy has scarcely yet extended, or raised it above the foundations of arbitrary opinion. Of the bulk of medicaments in daily use, there is a great want of accurate information of their really useful principles, as well as of the pathological states that indicate their use. The truth of this observation is demonstrated every day in the melancholy disasters to human life, which is doomed to fall a sacrifice to daring empiricism on the one hand, and the want of more definite and effectual remedial means on the other, to arrest the Protean forms of disease. Into the New York City Hospital, during the winter of 1846-7, typhus fever was introduced by European immigration. Among a great number of cases, I will select those of five sisters, German young women. They bore the marks of belonging to the middling classes of society, and of having been previously to the attack in a state of robust health. They were placed early under treatment the most skilful; yet in the course of two or three weeks, each was successively removed to the *dead house*! The insidious destroyer having laughed to scorn the impotency of medical skill,—and this, too, when directed by the most eminent of the profession, and in an institution pre-eminent for the possession of every advantage that wealth, science and humanity could procure. This fact, which is but one of a thousand similar that might be adduced, both in Canada and elsewhere, would surely call for humility in the members of our profession, and can never justify that haughty, self-sufficient bearing, which scorns truth, and disdains investigation.

The enlightened treatment of disease must be founded on sound views of pathology, accurate observation, profound reflection, and an intimate acquaintance with the *modus operandi* of our remedial agents. Without these we are but the vain practitioners of a conjectural art;—we fight our enemy in the dark, wound what we should protect, irritate what we intend to soothe, and justly deserve the epithet of “licensed manslaughterers.”

The times we live in are indeed pregnant with signs of momentous import. Society is heaving to its basis, and the human intellect has received an impulse that will allow it no longer to venerate systems because of their antiquity, but only on account of their utility. It is worse than idle, then,—it is immoral, to desire that the merits of the Water Cure should be put down without a hearing—without a trial.—“He that judgeth a matter before he heareth it, is not wise.”

The Water Cure is a necessary result of the labours of the immortal Liebig. It is acknowledged by all intelligent men, that it is not physic or the physician that cures, but the functions of the living organism. It is the unshackled play of its physiological actions alone that accomplishes both the restoration and the preservation of health. That water can be made to produce every salutary physiological action, and consequently every curative effort of the economy in a very large number of diseases,

is susceptible of the clearest demonstration ; and these too, in a manner beyond all comparison more certainly, safely, efficaciously and promptly, than the administration of drugs can do !

The false cry of danger will not now avail. The reports of committees of the most learned public bodies of France, Prussia and Austria, have already settled that question. It is notorious that eighty-seven sick physicians visited Gräfenburg in one year, and that most of them left their complaints behind them through the simple agency of Water alone. The writer of these pages might indeed adduce a volume of testimony in its favor, from the most eminent British physicians of the day—but as the limits of his pamphlet forbid this, he must rest satisfied with subjoining the following. He will merely observe, that he trusts that the high standing, the weight and character of the testimony adduced, will supply the necessity for a greater amount.

EUROPEAN AUTHORITIES.

The Opinions of SIR CHARLES SCUDAMORE, M. D., F. R. S.

"I take the liberty of recommending to the heads of the profession not to entertain any strong prejudices against the Water Cure treatment : however laudably desirous they may be to exercise a conservative principle on behalf of their patients, and of society at large, let them not decide without examination, or pronounce a verdict without a candid hearing of the cause. I have always been of opinion, that a physician should consider himself a student to the latest moment of his life, for the wisest must still have something to learn. It appears to me that Hydropathy is of the highest importance to the whole civilized world. Its principles are, I am sure, founded on nature and truth, and rest, therefore, on an immutable basis. The practice may be occasionally abused, and then evil, instead of good, result. If I could think that such a consequence was necessary, I would not for one moment be its advocate. But convinced as I am, that we have in our power a new and most efficacious agent for the alleviation and cure of disease in various forms, and in proper hands as safe as effectual, I should be no friend to humanity, nor to medical science, if I did not give my testimony in its recommendation. In regard to the opposition of a great part of the medical world to this innovation on the ordinary practice of physic, looking at human nature, we must attribute a little of it to its interference with settled interests.

"In its progress, the condition of the patient improves in an evident and sensible manner. The skin, from being pale and sallow, acquires a ruddy hue ; the muscles become fuller and firmer ; fat decreases ; and many are glad to lose a corpulent abdomen. In young, growing persons, it is soon made visible that the capacity of the chest increases, whence the lungs have fuller play, and a brighter bloom appears on the cheeks.

Exercise, at first a difficulty, now becomes a pleasure. The mind partakes fully in these benefits of the body; the senses become more acute, the faculties more energetic; and buoyant spirits take the place of langour, depression and *ennui*.

"I much fear that, from the facility and apparent simplicity of the practice, and the temptation to pecuniary gain, persons without the qualification of medical education will be induced, not only to form Water establishments, but conduct them altogether, and boldly undertake the responsibility of the public health. In no illiberal spirit, but from honest feelings, I protest against this monstrous pretension and error. Diagnosis is most essential. Who that is untaught and inexperienced can understand the different kinds and the many phases of disease? And without such discrimination, and also a judicious estimate of the powers of the individual to bear treatment, how can its amount be properly prescribed? A second Priessnitz, a man of so much original genius and powers of observation, with so vast an experience derived in so extraordinary a manner, is not, perhaps, again to be found; and I hope, therefore, that his example will not be considered a precedent: that Hydropathy shall be practised by other persons wholly unacquainted with either the exterior or the interior of the human body, and the complicated functions of the animal economy.

"In the formation of any Hydropathic Establishment, Water, as to its quantity and quality, must be the first consideration."

The Opinions of HERBERT MAYO, Esq., Senior Surgeon of the Middlesex Hospital.

Sir Charles Scudamore visited Mr. Mayo, at the time the latter was going through the Water Cure. He says, "I asked Mr. Mayo if, during his observation of the Water Cure treatment for upwards of a year, he had ever witnessed any accident to occur from it. He assured me, not a single one; he added, "This new system of treatment more than doubles our power of doing good. Of course it will meet with much opposition, but none, come from what quarter it may, can possibly prevent its progress and its taking firm root. It is like truth, not to be subverted." Sir Charles Scudamore further observes, "I am happy in the opportunity of meeting with my friend Mr. Mayo, whom I attended occasionally in London, when suffering most severely from Chronic Rheumatism. I was extremely gratified to find him in a satisfactory state of improvement. Formerly, the knees and hands were inflamed, swollen and painful, so that he could never obtain rest without the aid of a large dose of opium. He then suffered also very much from inflammation and rigidity of the muscles and ligaments of the neck. Upon examination of the knees and hands I found them perfectly free from all signs of inflammation, and reduced to their natural size. The patient was satisfied with his well-doing, and praised the Water Cure as having saved him from being a cripple." When Mr. Mayo went to the Water Cure he was considered in a hopeless state, and of course for years had

experienced all the benefits to be derived from all the best medical and surgical advice in London.

The Opinions of ERASMUS WILSON, M.D., F.R.S., Consulting Surgeon to the St. Pancras Infirmary, and Professor of Anatomy and Physiology in the Middlesex Hospital Medical School.

The following passage is selected from a late edition of Dr. Wilson's celebrated work on "the skin, &c.," republished by Messrs. Appleton, of New York. Dr. W. is justly acknowledged to be one of the staunchest supporters of medical science. He is too keen an observer to have been deceived, and we can hardly suspect him of encouraging empiricism. Yet he tells us, that "the water practice has effected important results in the treatment of disease," and will, he trusts, be instrumental in restoring to medicine one of her most valuable and important auxiliaries. "Medical men may be jealous that these benefits have been conjured from the vasty deep by other hands than those of the high priests of Therapeia; but they have no just reason of complaint, the treatment of disease by water has been neglected, &c., &c. * * * * *

It is true, Priessnitz has brought it to extraordinary perfection without the knowledge of anatomy, physiology, &c.; but he would have done infinitely more had he received a medical education. * * *

It is true, that with the Water Cure every person can eat infinitely more than under other circumstances. Water counteracts any evil effects. * * *

The wet sheet is the *chef d'œuvre* of Priessnitz. It possesses at the same time a sedative, soothing and soporific property, calming the pulse, removing feverish heat from the surface, and allaying pain and irritation. * * *

The wet bandage is very useful in dyspeptic disorders; it is based on the soundest physiological principles, is safe and easily tried. * * *

I have been familiar with the wet compress (or bandage) in different shapes for many years, and have seen the most beneficial and surprising results follow from its use." Dr. W. next proceeds to examine the various modes of employing water as a remedial agent—explains at length the philosophy of the cold bath—recommends it in the treatment of a great variety of diseases, and concludes by "hoping that the day is not far distant when we shall see such institutions (Water Cure Establishments) in the neighbourhood of all our large cities, and at our watering places."

This has already taken place in England, and on the continent of Europe, and is fast being consummated in our neighbouring republic. Cannot Toronto, or even Canada, support one Institution?

The Opinions of A. COURTNEY, Esq., Surgeon, Royal Navy.

"I am convinced that Water, judiciously used, will cure many complaints—that it will cure diseases that cannot be cured by medicines is my certain belief; but if it can cure a variety of complaints, it is by being used in manifold ways, and great judgment, skill, consideration and

caution are required in the application and use of it. A knowledge of the laws of health and disease is essentially necessary to him who would practise it, or else a long experience, combined with the discrimination of a Priessnitz."

Dr. Hume Weatherhead, a man of experience in his profession, cured himself speedily of gout by adopting the Water Cure treatment; and he quotes Dr. Behrend, of Berlin, a man distinguished for his learning and judgment, who says, "Practitioner as I am of fifteen years' standing, and editor for six years of a medical journal, I was at first a little mistrustful of this novelty, and compared it with many others whose authors pretend to reform the medical art, and who have completely vanished. But, Sir, that which I saw with my own eyes, at Gräfenburg, and other similar establishments, struck me, as it will you, with astonishment. I have seen an old intermittent fever cured by Cold Water, without quinine, or any other remedy. I have seen measles, scarlatina, small pox, nervous fever, rheumatism, gout, scrofula, tracheitis and other complaints of the throat, syphilis, tic douloureux and other nervous affections; tumours in the glands, swelling of the liver, and all effects of mercury, and many other diseases, cured by simple cold water, without the aid of any other remedy whatever, and in a comparatively short time, and a more favorable manner for the constitution than could have been obtained by any other means whatever. Cold Water is administered in all diseases internally and externally; but the method of application is varied, according to the individual and the case. Cold Water serves sometimes as a revulsive, and sometimes as a depressive agent, and if you, Sir, had witnessed what I have, you would not doubt more than myself."

It is doubtful whether, with all our pretensions to more just views of the art of healing, we are one step in advance of our ancestors; and that our practice is anything but a display of our success, we have but to glance at the long catalogue of diseases which remain to this day, the opprobrium of our art.

Matthew Baillie, physician to George the Third, and to George the Fourth, I believe also, after he had amassed a fortune by his profession, declared that he had no faith in medicines whatever; that he neither knew their manner of action, nor the principles which should direct him in the use of them, or, in other words, that he had been steering all his life without rudder or compass. Another physician to royalty, the late Sir William Knighton, observes, "It is somewhat strange, that though in many arts and sciences improvement has advanced in a step of regular progression from the first, in others, it has kept no pace with time; and we look back to ancient excellence with wonder, not unmixed with awe. Medicine seems to be of those ill-fated arts whose improvement bears no proportion to its antiquity. This is lamentably true, although anatomy has been better illustrated, the materia medica enlarged, and chemistry understood."

These, the candid confessions of men who had attained the highest eminence in their profession, should surely serve as lessons of humility to medical men, and create in them an anxiety to scrutinize rigidly any

system, however wild and visionary it may at first sight appear, before they attempt to enter a protest against it. For my own part, I have with astonishment and regret observed the flippant manner in which medical men in general, and some of our medical journalists likewise, treat really important discoveries; and how in particular they have hitherto treated the facts brought forward in proof of the success of hydriatism. Like drowning men catching at straws, they catch at and hold up to ridicule every little occurrence that they think may tell against the system (though such occurrences in general are nothing more or less than the results of ignorance in those who administer the remedy) while on the subject of the numerous cures effected they are silent. But what say the relatives, the friends, and the sufferers themselves to the long, long list of diseases which have for centuries set drugs at defiance? What say these persons? Shall a system which can appeal to the testimonies of clergymen and medical men, of peasants and of princes, for its success in those very diseases which have hitherto set medicines at defiance,—shall such a system be rejected? Shall those who have long smarted under diseases the most agonizing, without reaping any benefit whatever from medicines—who have been for years flying from one medical man to another, in the vain expectation of finding a cure—shall those martyrs to disease who have sought relief fruitlessly from other sources, be denied the benefit of a system which has effected so much? Shall he, to whom returning seasons bring no relief, be withheld from the trial of a system whose efficacy has exceeded all anticipation, I might say all credibility? Medical men, whether allopathists or hydriatists have, it is to be hoped, the same end in view, the prevention and cure of disease, and the good of their fellow creatures; and cannot, in justice, or with a show of reason, be at enmity with one another. The thing is not personal. No medical man, I am sure, who has the good of his fellow men in view, will be backward in recommending to those whose diseases he cannot relieve by the usual medicines, a trial of a system which aims at the same end as his, and which has effected cures in many cases where medicines had failed to give any relief whatever.

Dr. Wilson's "Stomach Complaints and Drug Diseases" may also be of much greater service to the purchaser than the money they would cost.

The latter contains a fine expose of the opposition of Dr. Hastings, of Worcester—"of the true cause of his opposition to, and dread of the progress of the Water Cure, a cause which indeed appears to lie at the bottom of all opposition to it. But I need say no more on this head—*grovelling cupidity, and gross ignorance of the various ways in which the water is used, are the reigning characteristics in every argument brought against the system.*

"Men may just as well argue that black is white, as argue against the Water Cure. In gout, rheumatism, indigestion, bilious complaints, nervous affections, inflammatory, cutaneous, and many other forms of disease, the facts are so numerous of its infinitely superior efficacy and safety over drugs, that all the fine-spun theories and cunningly devised

fables of the drugmen will prevail about as much against it, as did Widow Partington's broom in keeping back the ocean."

Of JOHN FORBES, M.D., F.R.S., *Physician to the Queen's Household, Editor of the British and Foreign Medical Review, one of the Editors of the Cyclopædia of Practical Medicine.*

"The fashionable system of Hydropathy is unquestionably far from inert, and is most opposed to the cure of diseases by the undisturbed processes of nature. *It in fact perhaps affords the very best evidence we possess of the curative powers of art, and is unquestionably, when rationally regulated, a most effective mode of treatment in many diseases.* Still it puts in a most striking light, if not exactly the curative powers of nature—at least the possibility, nay, the facility with which all the ordinary instruments of medical cures (drugs) may be dispensed with. If so many and such various diseases get well entirely without drugs, under one special mode of treatment, is it not more than probable, that a treatment consisting almost exclusively of drugs, may be often of non-effect—sometimes of injurious effect?"

"An intelligent and well-educated hydropathic physician, on whose testimony we can entirely rely, informs us, that in a great many cases that have come under his care in a hydropathic establishment, he has observed the symptoms amend, on the first commencement of hydropathic remedies, with a suddenness and speed which he could not conscientiously ascribe to the means used, so much as to the abandonment of injurious drugs which the patients had previously been in the habit of taking. Our informant points out to us another natural field of observation in this line, in the numerous patients discharged, cured or relieved, from hydropathic establishments, almost all of whom carry with them such a horror of drugs, that they never have recourse to them if it can be helped afterwards."

Speaking of the effects of cold bathing, Dr. Forbes says, he considers the cold bath one of the most valuable remedies we possess, viewed either as a hygienic or curative agent, and would recommend its use in the various forms of general debility which show themselves in childhood and youth, either as congenital constitutional peculiarities, or as the consequence of previous disease. As a preventive of the numerous diseases produced by cold, or rather by the variations of temperature, the cold bath, in one or other of its forms, excels all other measures. In the numerous family of the catarrhal disorders, it is almost the only preventive of value. Dr. Forbes thinks the cold bath applicable to the whole class of nervous diseases, properly so called, and particularly in those slight anomalous nervous affections so constantly met with in practice, and under such varieties of form. It is a useful remedy in chorea, hysteria, and some cases of epilepsy; in loss of voice, smell, taste, &c.; certain forms of hypochondriasis; local paralytic affections, such as loss of power in the sphincters of the bladder or anus; long standing cases of palsy;

in chronic affections of the mucous membranes, attended with discharges, such as leucorrhœa, gonorrhœa, &c. ; in chronic catarrh, particularly in the dry catarrh ; and in those forms which seem to depend on a relaxed more than an irritated state of the bronchial membrane ; in passive hemorrhage, as epistaxis and menorrhagia, in amenorrhœa, in nervous or functional dyspepsia, and in mania. In no disease is the cold bath more beneficial than in the intervals of asthma. It is likewise useful in the latter stages of whooping cough, and in the intervals of uncomplicated ague ; in rheumatism, fever ; in cases of a debilitated and relaxed habit, &c. &c.

The warm bath, he informs us, is useful in cases of mild disorders, such as fatigue after great muscular exertion—after long-continued mental excitement and loss of sleep ; irregular determinations of blood, particularly congestions in the internal organs, and recession of it from the surface and extremities ; nervous irritations of all kinds, and disposition to spasmodic affections ; a dry and harsh state of the skin, either with a disposition to feverishness, or with coldness of the surface ; the reverse state, of relaxation of the skin, with a disposition to clamminess and cold perspiration ; and among the more serious forms of disease, the following chronic nervous diseases of a spasmodic kind, under certain qualifications, such as cramps, spasms, convulsions of various kinds, and particularly the convulsive affections of infants, whether depending upon idiopathic or sympathetic irritation of the nervous system. Of this kind are the numerous forms of neuralgia, including sciatica and lumbago, gastralgia and colic ; also gall stone, nephralgia, stone in the ureter, bladder, urethra, &c. Certain acute inflammations, more especially of the mucous membranes of the abdominal and pelvic viscera, when accompanied by great pain, as enteritis, gastritis, inflammations excited by and accompanying gall stone and urinary calculi, some forms of dysentery, diarrhœa, cystitis, hysteresis, &c. That it is also beneficial in that extensive class of diseases of the intestinal mucous membrane, named chronic gastroenteritis by the French writers, and indicated in different cases by the common symptoms of dyspepsia, constipation, diarrhœa, &c. ; also chronic inflammations or irritations of the uterus vagina, bladder, kidney, dysmenorrhœa, dysuria, amenorrhœa, leucorrhœa, &c. ; and is strikingly beneficial in those affections of the stomach and bowels, which are commonly ranged under the head of *dyspepsia*. It is also useful in gout, general disorder of the system from long-protracted dyspepsia and loaded bowels, diabetes, chlorosis, rheumatism, the local sequelæ of gout, nodosity and other chronic affections of the joints, partial paralytic affections, muscular contractions, &c. A great number, as well as a great variety of chronic diseases of the skin, both idiopathic and sympathetic, are greatly benefited by the warm bath, in one or other of its forms. In fevers of long standing, marked by much nervous irritation, harsh dry skin, &c., the warm bath of low temperature, or the tepid bath, is very beneficial. Many other diseases, he adds, may be mentioned, in which the warm bath is occasionally found to be a very valuable remedy.

The experience of DR. ROBERT HALLS, of Colchester, England.

"During my residence as a student at Edinburgh, I had an opportunity of seeing several cases of petechial typhus treated, under the direction of Dr. Gregory, by the external application of cold water. The success attending the practice, made me resolve at that time to adopt it whenever I should have an opportunity. I am obliged to Mr. Hutcheson, Surgeon to the Surrey Fencibles, who permitted me to attend his hospital in Colchester, in which a very malignant fever prevailed for two or three months during the spring of the present year. For some time previous to the appearance of the fever, the small pox had been very common, and proved more fatal than I had ever known it. A few soldiers had died of it in the hospital owing, principally, I believe, to the obstinacy with which they persisted in the use of strong liquors, and to the heat of the atmosphere, in which, notwithstanding every effort of the surgeon, they were kept. It is probable that these deaths, by dispiriting such patients as were seized with typhus, rendered the effects of the fever more violent. It would be needless for me to recount the symptoms of typhus. The cases which I saw were not in any respect singular; except that like those of Edinburgh of a few years back, they began with catarrhal symptoms, accompanied with acute pain in the side, occasionally so violent as to call for blisters; which generally afforded relief, and promoted the expectoration. In almost every case extremely copious petechiæ were observed very early in the disease, numerous, of a dark colour, and extended over the whole body. Several of the patients assured me—and I certainly did not attempt to undeceive them—that 'it was nothing but the itch.' The pulse, in two or three instances, where the pneumonic symptoms were most violent, was, during the first three or four days strong and bounding, notwithstanding the petechiæ were at that time very copious. It generally, however, sank quickly. There were some trifling varieties in different cases, but I do not think it important to notice them.

"In all, I prescribed the washing of the whole body with cold water and vinegar twice a day, and never without marked advantage,—in some instances more, in others less permanent. At first, where the pain in the side and other catarrhal symptoms were urgent, I directed, with hesitation, the use of the cold water. As the fever, however, on the whole appeared the disease from which most was to be apprehended, I thought myself authorized in making the experiment; and I had very soon the most complete conviction that I had nothing to fear. The pain in the side, cough, &c., far from being aggravated, were in every case relieved. The effects which I more particularly observed as ensuing from this application, were the following:

"The number and livid appearance of the petechiæ were universally lessened. The pulse, when weak and frequent, became slower and stronger; the skin moist and soft. The head was more free from delirium. Sleep was procured. The appetite often returned, and in some cases thirst was produced. It may appear singular that I should

mention the production of thirst as among the favourable effects of this remedy. I conceive it to have arisen from the diminution of the delirium, which rendered the patients sensible of thirst, to which previously, notwithstanding the very hard and parched state of the tongue, they had been altogether insensible.

Of all the cases treated in the above manner (not less, I believe, than twenty) I did not lose one; nor do I recollect any instance of a relapse. The termination of the fever was marked by no evident crisis. No medicines were given except an occasional opiate with ether, or a laxative injection, as circumstances appeared to point out the use of the one or the other."

Of R. HALL, M.D., of London.

"In the last volume of the *Annals of Medicine*, an account is given by Dr. Brown, of Bath, respecting the salutary effects of cold applications to the head in insanity. I have also experienced beneficial effects from the use of the same remedy in similar cases. Dr. Brown justly observes, that this is an old practice, and that it has often failed. Its failure, however, I concur with him in attributing, in a great measure, to the manner of its employment, and to the want of a due perseverance in its use. In several cases of incipient, and in one case of confirmed insanity, from the assiduous employment of cold applications to the head, I have witnessed the happiest effects. Cloths dipped in the coldest water, or artificially rendered so after being gently wrung, were kept constantly applied to the head, and renewed as they acquired heat, until a sense of cold and chilliness were induced and propagated over the whole system, which seldom failed to produce relief, and prove the harbinger of returning rationality; after which, for the most part, an occasional recurrence to this remedy was only found necessary. Not unfrequently this mode of applying cold to the head was interchanged with the effusion of cold water out of an appropriate vessel, and from a considerable height."

Of WILLIAM B. CARPENTER, M.D., F.R.S., Professor of Physiology in the Royal Institution of Great Britain, and Lecturer on Natural History and Comparative Anatomy at St. Thomas's Hospital.

"No solid substances can ever be taken up by the roots of plants until they have been dissolved in the water which they imbibe; and all the matters which are taken into the stomachs of animals must be reduced to an equally liquid state before they can be carried by its circulation into the several parts of the body, to whose nourishment it is to be applied. Hence, in all living beings there is a demand for liquid, as the solvent or vehicle by which these solid matters, of which the remainder of the structure is composed, are introduced into it. We may just as well go without solid food as without drink. If the most nutritious substances were conveyed into the stomach, and that organ could not pour forth a liquid secretion capable of dissolving it, the mass of bread

would be of no more use than if it had been stone. And if, when taken into the blood vessels, the solid matter be not sufficiently diluted with liquid to enable it to flow freely through them, it would at the same time produce the general stagnation of the circulating current, and would be incapable of serving any purpose in the nutrition of the body.

But, further, the various waste products of that decay of the tissues which has been several times alluded to as being necessarily connected with their activity, as parts of the living animal, must be conveyed out of the body either in a liquid or a gaseous form. A considerable portion of them is carried off, as we have seen, by the process of respiration, or breathing; but there still remains a large amount which has to be separated from the blood by the two great glands, the liver and the kidneys, and by a number of smaller glands, which are thickly scattered over the lining of the intestines, and over the surface of the skin. The purpose of these bodies is to draw off from the blood whatever substances are unfit to circulate in its current, and to get rid of them from the system: and in doing so, they necessarily draw off at the same time the liquid in which these substances are dissolved. Hence, there is a continued loss of fluid from the living body, besides that which would be naturally carried off by evaporation from its soft and moist surface.—And this loss is largely increased in many instances, as we shall presently see, by the exhalation of an additional quantity of vapour from the skin for the purpose of keeping the temperature of the body down to its proper standard, when the external air, joined to that produced within itself, would, otherwise, raise it too high. Hence, a continual supply of liquid is necessary to keep up the amount of it which the body ought to contain; and as none of the warm blooded animals can be reduced by the loss of that from their fluid to the same torpidity as that into which certain of the cold-blooded tribes pass, any considerable deprivation of it is fatal to them. Hence we find that animals which are entirely deprived both of food and water die much sooner than those which, though deprived of food, are allowed as much water as they require. And most of those unfortunate human beings who have suffered from the extremity of thirst as well as hunger, declare that the former is the hardest to be borne. Its maddening effects were never more remarkable than in the dreadful scene of the 'Black Hole of Calcutta,' referred to on a former occasion. The human skin, like the leaves of plants, is continually giving off a large quantity of watery vapour, which passes away quite insensibly to ourselves unless the surrounding air be loaded with moisture. And a considerable quantity of water in the shape of vapour is also carried away in the breath. We become aware of the presence of the latter, when we breathe against a window on a cold day; for the glass, being chilled by the outer air, cools down the breath which comes in contact with it, and causes its moisture to be deposited on its surface. When several persons are shut up in a coach or railway carriage on a frosty day, the moisture which is exhaled from their lungs and skin quickly forms a thick layer upon the glass, which is renewed almost as soon as it is wiped away. The whole quantity of liquid which thus passes from the

human body in the state of vapour, seems to average about two pounds per day. But a very large quantity is poured out when the body is overheated, either in consequence of violent exertion, or of the high temperature of the surrounding air. In this case it is exuded upon the skin faster than it can be carried off as vapour by the atmosphere, and it accumulates in drops, forming the sensible perspiration, the quantity of which may be increased, under particular circumstances, to an enormous extent. Now, the chief object of this pouring out of water from the surface of the body is to keep down its temperature within the proper limits. Whenever water, or any other liquid, passes off in vapour, it takes heat from the surface on which it may be, and thus, as long as the flow of perspiration continues its passage into the atmosphere in the state of vapour, has a cooling effect upon the animal body. Provided, therefore, the internal supply of liquid be abundant, and the air be dry enough to carry off the moisture in vapour as fast as it is exuded, the temperature of the body will be but little raised by any external heat that does not absolutely burn it. And thus it is, that persons who have accustomed themselves to sustain the heat of furnaces, stoves, &c., can remain for some time in situations in which the mercury rises to 500° of Fahrenheit's thermometer,—a temperature nearly sufficient to boil quicksilver. But if the body be exposed for a short time to air not many degrees hotter than itself, but already loaded with watery vapour, no cooling effect is produced by the perspiration, because the liquid poured out from the skin cannot be dissolved by the air, and carried off by it, so that if the external heat be kept up, the temperature of the body itself is raised above its natural standard, and death is the result.

"Hence we see that all organized bodies require a continual supply of liquid. In the first place, as one of the principal materials of the bodily fabric, and secondly, as the vehicle for the introduction of the solid part of their food; whilst animals require it also, thirdly, as the vehicle for carrying off those products of the continual waste of the system which the respiratory process does not remove; and, fourthly, as the means of keeping down the temperature of the body, when the external and internal supply of heat would otherwise raise it above its natural standard."

Of C. T. COOKE, Esq., Surgeon.

"As it is pretty well known that I have been spending the last fortnight at Malvern, partly for the benefit of my health, and partly for the purpose of enquiring practically into the nature of the means now employing there for the prevention of diseases, and for the recovery of health, it is not unlikely that I may have many applications made to me for information on the subject. I feel, therefore, desirous of meeting these inquiries by first showing the principle—the great principle upon which those means are employed; and I know not that I can do this better, or better state what my own convictions are upon the subject, than by requesting you to insert the following letter, written by me while at Malvern to one of my medical brethren in this place. I will only add, that the means adopted

are ; 1. Drinking cold water. 2. Cold bathing after passive sweating. 3. Cold bathing without sweating. 4. The wet sheet. 5. The wet sheet bath. 6. Partial bathing of particular parts. 7. Douche, or spout bath. 8. Cooling compresses. 9. Animating bandages. 10. Frictions.

"These are all modified in their use according to the circumstances of each particular case ; and I have no hesitation in saying, require the exercise of as much judgment and discretion, as any other mode of medical ministration.

"To you, who so well know what a life of suffering mine has been, it will be no matter of surprise to hear that I should have been obliged to leave home for the purpose of rest and quiet ; nor will you wonder that I should have come to this place with the view to give fair trial to the extraordinary use of a simple remedy, having, as you also know, tried every ordinary remedy in vain. I am also anxious to ascertain by personal observation and experience, for the benefit of others as well as myself, what are the real pretensions of what is called 'The Water Cure' to the estimation which it so loudly claims from the profession, and the public. To you, and to myself, it will be no marvel if it should substantiate those claims. You have always in your own case, as well as in your practice, given to the skin its fair share of attention, and in my little book on the management of health and life, published as long ago as 1826, are to be found the two passages I have quoted and enclosed for you. It was a pleasure to me to hear, before I left home, that you had spoken favorably of Dr. Wilson's mode of ministering to disorder and disease ; and I am still further gratified, by finding patients of yours under his care, who bear testimony to your liberality of feeling on the subject. As yet, I cannot speak of myself as being better, but you know the nature of my ailment, and will not expect too much, any more than I do, from even this mode of relief—combined though it be with what I so much need—comparative repose from labour.

"If I am spared to return, it will be a great gratification to me to tell you all I have witnessed, and all I have experienced of the effects of Dr. Wilson's varied application of his one remedy. I have already beheld much that would have surprised me, if I had not long since learned that the simplest means are the best in the hands of a *minister naturæ* ; or the minister of God had not, from a very early period of my life, defined the practice of medicine (in its unsophisticated sense) to be 'good common sense directed to a particular object,' and I might add, that object a blessed and blessing one.

"If you should feel inclined to take a drive over any day whilst I am here, I should be glad to see you, and to have the pleasure of introducing you to the author of 'A Practical Treatise on the Cure of Diseases by Water, &c. &c.'"

Of JOHN KING, M.D.

"Calling one morning on a clerical friend, I found laid upon the table of his study one or two works on Hydropathy. I need scarcely add, the

subject
conver
produ
of our
that t
specie
fluid
the so
as va
memb
which
This
"J
conve
resur
ackn
fixed
subj
"
since
and
good
After
(for
relie
and
imp
felt
una
self
into
vivi
wit
eru
dys
app
sim
cor
wa
int
dec
ab
an
inf
res
du

in

subject was of sufficient interest to afford a lengthened topic of conversation. On leaving my friend's residence, the result our discussion produced on my mind was,—that Hydropathy, like many of the "isms" of our day, was fanciful, ideal, a mere phantom of the imagination, and that those who zealously advocated its cause were labouring under a species of monomania. I reasoned to myself thus: that water, a simple fluid possessing no specific property, could in any way cure disease; that the sciences of medicine, anatomy and pathology, were to be considered as vague, unmeaning terms in the honorable and learned profession,—a member of which I was proud to boast myself—and that a science to which I had devoted the best part of my life should ever be superseded. This could never be!

"It was not long before another opportunity presented itself for conversing with my friend, and the all absorbing topic was again, naturally, resumed and discussed, at the termination of which I must candidly acknowledge, some of my stronger prejudices yielded, and I came to a fixed determination to peruse every work which had been written on the subject, with an unbiassed feeling.

"The result of my investigation produced these resolutions,—that since the simple and proper administration of pure water, both externally and internally, could not be productive of much harm, if it caused no good, I would quietly and perseveringly test in some measure its effect. After some few weeks' trial, to my no little astonishment and satisfaction (for I commenced it in utter faithlessness) my usual symptoms were relieved. On I proceeded with unmoved, unwearied, energy and zeal; and at the expiration of about two months, though sensible of the vast improvement in the powers of my digestive apparatus and energy of mind, felt almost sceptical as to its reality. But it was no delusion, it was unadulterated truth, clear as the limpid fluid which I had taken; it was self-evident as the rays of the noon-day sun. Continuing daily to carry into operation this most valuable discovery in the Esculapian art, its vivifying and tonic effect was sensibly felt in my system. Dyspepsia, with its accompaniments, flatulency, painful distension after meals, acid eructations, with a most unpleasant symptom generally known to the dyspeptic, a distressing, sinking sensation in the stomach, sometimes approaching to syncope, had vanished. To illustrate this, I will simply recite a case of a clergyman, from whom I received the communication. Whilst actively engaged in his ministerial duties, he was attacked by severe phrenitis (inflammation of the brain) which called into action all the energy and skill of his medical attendants. It was deemed necessary to carry depletion to a considerable extent by the abstraction of blood, both general and local, the application of blisters, and other most powerful and antiphlogistic means, in order to subdue the inflammatory action. It was full three months before he was sufficiently recovered, and had gathered strength enough to resume his professional duties.

Many years after, he was again seized with a similar attack, and was incoherent—but what plan was then pursued? No abstraction of blood

—no application of blisters—and not one particle of medicine was taken. He was judiciously treated under the hydropathic plan, and in *three or four days* he was able to walk out, and was completely restored !

"We may venture to hope that as soon as this most invaluable mode of treatment (hydropathy) becomes more fully appreciated and universally adopted, pulmonary affections, at their commencement, as well as the various cases of liver and stomach complaints, will be radically cured.—A corresponding decrease, as there has been of late a proportionate increase, of disease, may be rationally and fairly anticipated. Doubtless, we ought to admire with adoration and gratitude the infinite wisdom and goodness of the all-wise Creator of the universe, in supplying our wants so munificently, with so inestimable a fluid, so pure and so plentiful as Water."

"Facts are chiefs that winna ding,
And daurna be disputed."—BURNS.

Of THOMAS SMETHURST, M.D.

"My object is to shew, that in Water we have one of the most powerful therapeutic agents yet discovered; that its effect in curing diseases is wonderful, and that a general adoption, now that it has taken root, cannot fail to take place in many and most diseases.

"Many, and no doubt the majority, of my medical readers, are still opposed to the Water Cure, and look upon it with a prejudiced eye; many more among the public have yet to be convinced of its benefits; but it cannot be otherwise. As with every great truth, it is slow in forcing itself upon the mind, but in the end, truth must prevail.

"Some medical men, desirous to give Water a trial, have tried and found it wanting, through mismanagement, lack of perseverance in themselves, or in their patients; and occasionally adding a dose of their own, by which the cure was either interrupted or defeated. The Water Cure requires patience, perseverance, and a knowledge of its great effects; without these it is impossible to succeed. It requires careful study, and I doubt not, that by a proper and due cultivation, hydropathia may become even more brilliant in its results. The use of medicines, according to the present allopathic principle, in going through the Water Cure, is to be utterly repudiated, chiefly because all the functions of the organism are kept in complete activity whilst under the treatment, as far as the existing vital power in the individual treated admits of this; and that such being the case, the remedies administered may have a different effect to what was anticipated, or wished for.

* * * * *

"In concluding the article, we may yet add in praise of Priessnitz, that his riches (£150,000) have not, as too often happens, inflated his pride; but that he is the same humble, modest and unassuming man, respected and esteemed by his neighbours for his humanity and benevolence."

Of G. H. HEATHCOTE, M.D.

"The term 'quackery' has of course been applied to this new system. The charge is of formidable sound, it must be granted, but it is empty sound after all; it is unsupported by a single argument; it is based upon no reasoning whatever; and even though it be the opinion of a physician, it is an opinion so stated, as unsubstantial as those dark spots which are engendered in the human vision by looking at the sun—it is an obscuration from intolerable light. There is no obscurity in the system itself; but there are eyes which cannot bear to look upon it. I, too, am a physician, (excuse a little egotism,) I have the honor of having been granted that degree both by the College of Physicians in Edinburgh, and by the College of Physicians in London.

"The principle of hydropathy is that of the eradication of disease by various curative actions of the vital functions, which it has the power to excite, by the various modes in which it can be applied; so that the remedial power of this system approaches as nearly to a panacea as mankind perhaps is ever destined to obtain.

"The principle of allopathy is that of the eradication of one suffering by another diverse and derivative. It is an awkward principle. A physician has said, 'formerly medicines were prescribed, less for the disease than the name of the disease. Having personified disease into some mysterious living being, they prescribed medicine, as it were with a view of killing that disease by poison! That which was called a dose of medicine to the patient, was thought to be a dose of poison to the disease. It often poisoned both the disease and the patient.' It is an awkward principle, and like Russell's political purge for constitutional obstructions, it produces 'untoward events.'

But when we reflect upon the multitude of these medicines—when we consider that each class has a regiment of species, and that every day recruiting goes on, adding some new individual to this medicinal army, what must be the natural inference of an intelligent mind? What but that the old soldiers are no longer found efficient; that at last they are good for nothing, and must give way to raw recruits. So that in fact the general himself, the general practitioner, is laid under the necessity of healing without medicines—at least, without the former army with which he attacked the disease in the last invasion. But more than this, and worse, not unfrequently his army mutinies; his mercurial regiment, for instance, goes over to the side of the enemy—itself becomes a disease, and both the general and the constitution are at length overcome, either by the unexpected dereliction of the traitorous drug, or by the protracted state of the intestine war. It has ever been hazardous to employ mercurial troops.

"This is a figurative illustration, it is true; but it is a just expression of undoubted facts,

"That with regard to the use of medicines, it has been discovered that the principal functions of the body, indirectly excited by medical agents, can be directly excited by applications of cold water.

"Particularly that perspiration, the most critical function of the body, both in health and disease, can be commanded by the processes of hydropathy, in a manner which no medicine has ever yet accomplished.

"That there is evidence, that diseases which have not been remedied by medicine have been cured by this new system.

"That in acute diseases, the rapidity of the cure is more remarkable; and that the remedy leaves no convalescent state of debility.

"Thus the principle of hydropathy is, to lead us away from the vain and absurd task of contending against one disease by the introduction of another; and to point out to us the immaterial and inherent curative power itself, which operates, not by seeking a foreign and external power to introduce into the body, but by taking away out of the body that which diseases it, through the instrumentality of its inherent force created in the midst of those natural elements which it has power to control as long as the Creator wills. I think this is the just expression of the *modus operandi* of the processes of hydropathy."

Of JAMES FREEMAN, M.D.

"Hydropathy has been too much regarded as simple and uniform in its operation. The truth is, that it effects almost every change which drugs can effect, only by safer and more certain means. For instance, the internal purging of calomel, aloes and scammony, is substituted by the external purging of the dry blanket, or wet sheet; the counter-irritation of a blister or mustard poultice is replaced by a similar power exercised by the compress; the tonic effects of cinchona, gentian or iron, are represented by those of the cold bath, douche, or sitz bath. This comparison might be further pursued if necessary.

"The application of hydropathy, thus regarded, requires as much skill and knowledge as any other remedial method. What it really professes is, to possess more power than other remedies; to leave the system not only radically cured of all morbid taint, but unimpaired by the injurious effects produced by drugs; to remove an old disease without superinducing a new one, and without communicating to the patient an unwholesome habit of body, as too often follows the use of opium, calomel, aperients, &c., and more than all, to be able to cure or relieve many diseases in which other treatment has failed, even when employed by its most eminent professors.

"In order to shew more forcibly the fact, that hydropathy operates in a manner accordant with scientific medical principles, let us illustrate the above remarks by a supposed case. Take, for instance, Chronic Rheumatism. In this malady the morbid phenomena are combatted by the solvent and eliminating action of daily perspiring, &c., &c.; instead of the cupping and mercurializing of other systems, this is seconded by the counter-irritation of douches and compresses, which represent the blisters, liniments, and ointments of the apothecary. The cure is completed by the tonic action of cold bathing, appropriate diet, water beverage, and exercise, which answers to the bitters and other nauseous tonics usually

administered. Is not this strictly consistent with the best principles of medicine? If space permitted, the same might be shewn of most other diseases."

Of A. F. THOMPSON, M.D., F.L.S., Professor of Materia Medica and Therapeutics, in the London University.

I extract the following from the article on Refrigerants, in the *Cyclopædia of Practical Medicine*, by Dr. Thompson. He says, "Refrigerants operating on the sensibility of the body are few; but they are more directly refrigerant than those which have been already noticed (*i. e.* drugs). Cool air, the first of these, is so agreeable to the feelings in a heated state of the body, that observation alone might have led to its early employment as a remedial agent; and nothing marks more strikingly the perversity of mankind than the opposition of physicians to the indulgence of the instinctive desire for this remedy in fever patients."

"If cool air be beneficial in the above mentioned condition of the body, cold water and ice are still more so. * * * When cold water and ice are employed as curative agents, their influence may be obtained either by internal administration, or by their application to the surface; in both cases their effects are extended by sympathy over the system, but they are modified by the manner in which these agents are used. If the body be immersed in the cold bath, the most striking effect is the shock of nervous impression, which produces the vascular reaction - so beneficial as a tonic * * *

The shock and reaction caused by cold effusion is as considerable as when the cold bath is used; but it is more transitory, and therefore is a more useful refrigerant.—Sponging with cold water, as far as a simple refrigerating effect is desired, is preferable to either the cold bath or affusion; there is no shock; the fluid merely cools the surface, and by perseverance in the cold sponging, the cooling effect is rendered permanent. * * * The sedative and refrigerating influence of evaporating lotions is not confined to the part to which they are applied, but extends to other parts of the body, even to the interior, as for instance, to the brain, to the contents of the abdomen, and to the joints."

Dr. Thompson next proceeds to speak of a few of the diseases in which Water is applicable. The following is a synopsis of his remarks. He recommends it in local inflammations on the surface of the body; in deep seated inflammations, as those of the brain and its membranes, and says, "These applications (cold) have been lately recommended in other internal inflammations, as those of the thorax (including the lungs, heart, and investing membranes) and abdomen, (or of the bowels, liver, kidneys, &c.) and under proper circumstances, have been found highly beneficial." In all external hemorrhages where it is unnecessary to take up vessels, cold water is the best astringent; and in all internal hemorrhages of an active nature. In fevers, refrigerants under every form are the most valuable set of therapeutical agents. In inflammatory fever the advantages to be derived from them are well understood. The

cold affusion is admirably adapted for rapidly abstracting the stimulus of heat, diminishing general excitement, and operating as a powerful sedative. In fevers of a typhoid type, the disease has been cut short by the cold affusion.

"In Synochus, or inflammatory fever of a typhoid character, cold affusion is chiefly applicable to the early stages; and indeed no form of remedy is more advantageous when there are no local determinations.

"In remittent fevers, cold affusion may be employed with great benefit. In yellow fever, the safety of the patient frequently depends solely on its early application.

"In most eruptive fevers, except measles, the body should be freely exposed to cool air; and the cold affusion may be safely and advantageously prescribed; nor should the presence of the eruption operate as a reason against its employment. The Hindoo physicians plunge their patients during the eruption of *small pox* in cold water, and with the best results. It diminishes fever, lessens the number of the pustules, and is said to *prevent pitting*." In scarlatina Dr. T. has been long in the habit of employing the cold affusion during the height of the eruption, and has seen the severity of the disease instantly checked by it.

In intermittent fever (*fever and ague*) the affusion should be used in the hot stage of the paroxysm, and continued until the body returns to its natural temperature.

"It is unnecessary," continues Dr. T., "to discuss the nature of the various diseases in which refrigerants are indicated. In one local disease, phrenitis, their advantageous effects are very conspicuous; the most furious delirium is quickly subdued by allowing cold water to drop on the head."

Of EDWARD BARLOW, M.D., Physician to the Bath United Hospital and Infirmary.

"Cleanliness" says Dr. Barlow, "is essential to the health of infants, the functions of the skin being of high importance, and requiring to be kept in due activity. The body should be washed all over once a day at least; and impurities should never be allowed to remain for any time in contact with the skin. At first, the water used should be tepid, but after a few months the temperature should be gradually lowered, until cold be employed, unless there be such extreme delicacy and deficient reaction as to render this hazardous. Children bear well the transient application of cold, which in general is succeeded by a genial glow both refreshing and invigorating. Many weakly children are renovated in health and strength by a daily plunge in a cold bath."

Dr. B. considers the daily use of the cold bath one of the best means which can be resorted to in imparting vigour to feeble children, and in counteracting a tendency to deformity; and that cold bathing under proper restrictions is a powerful tonic in all cases of "local or constitutional debility," irrespective of age.

Of SIR ASTLEY COOPER, BART., F.R.S., *Surgeon to His late Majesty, William IV.*

"The means by which I preserve my own health are temperance, early rising, and sponging my body every morning with Cold Water, a practice I have pursued for thirty years; and though I go from this heated theatre into the squares of the hospital in the severest winter nights, with merely silk stockings on my legs, yet I scarcely ever have a cold.

"In deep seated inflammation, as in that of the brain, and in determination of blood to the head, the application of ice to the scalp is of signal service.

"This experiment led me to an examination of the principles of the action of the cold bath; and I found that when a person in health takes a cold bath, not being accustomed to it, it produces irritation, and sometimes renders the pulse irregular; but on the contrary, when a person in a state of irritability and weakness, with a feeling of heat about him, goes into a cold bath, it tranquillizes the nervous system, and therefore is beneficial. It absorbs the superfluous heat, lessens nervous irritability, and reduces the pulse when quickened, nearly to its natural standard.

"I had injured my health by being too much in the dissecting room, and I discharged a considerable quantity of blood from my stomach, and fever was the consequence. In this condition I went into the country for the benefit of a pure atmosphere; and I there had frequent opportunity of noticing the influence of cold on an irritable pulse in my own person. When my pulse was quick and irritable, and my skin was heated, if I used a cold bath in the morning, on that day my pulse was slower and the superfluous heat was removed; so that the body was much cooler than on the preceding day, or on the succeeding day, when the bath was not used. Thus, where there is great irritability of the nervous system, and where the heart is sending the blood with accelerated motion through the different channels, cold will prove invigorating, by lessening the first of these affections, and reducing the latter to the natural standard.

"The manner, therefore, in which cold relieves inflammation when locally applied, is by abstracting heat, by lessening the diameters of the vessels, and by diminishing nervous irritability."

My own experience entirely corresponds with that of Sir Astley Cooper, in the effects of the cold bath. In the treatment of typhus fever I have in several instances known persons go to sleep while in the bath, who were previously in a state of delirium; and who had not enjoyed rest for several days. Such is the controlling influence it has over the nervous system.

Of M. BRIERRE DE BOISMONT.—*Read before the Academy of Medicine, Paris.—From the Revue Medicale, 1846.*

M. Boismont, in his paper on insanity, has the following, which I take

pleasure in laying before you. Not that I am willing to avow myself an advocate for the treatment (in its details) which he recommends, but because I have seen many maniacs restored to their friends and to the world who, but for the judicious use of water, would, in all probability, have been to this day incarcerated within the musty walls of a lunatic asylum.

"1st. All the acute forms of insanity, and especially of mania, may be cured in a space of time varying from one to two weeks.

"2nd. The treatment consists in the employment of prolonged baths and irrigations.

"3rd. The duration of the bath should be, in general, from eleven to twelve hours, but it may be extended to fifteen or eighteen.

"4th. The irrigations of the head, by a gentle stream of water, should be continued during the entire continuance of the bath, unless the patient becomes composed, when they may be suspended.

"5th. When the patient has taken from eight to ten baths without marked amelioration, they must be suspended to be resumed at a future period.

"6th. The temperature of the baths should be from 82° to 86° and that of the irrigations 60° .

"7th. Of all the forms of insanity, acute mania best yields to this treatment; then simple acute delirium, delirium tremens, puerperal mania, and melancholy monomania, with acute symptoms; but in several of these forms of disease the cures are neither so rapid nor so permanent as in acute mania.

"8th. Chronic mania with acute symptoms, and chronic mania with agitation, may be ameliorated but not in general cured by this treatment."

Of JOHN BALBIRNIE, M.D.

"An ardent spirit of inquiry, a keen sifting of old systems, with a wide publicity to new discoveries, are peculiar features of the times we live in. Truth cannot *now* be scowled down by the frowns of authority, nor put out of countenance by the jeers of ridicule. Personal feelings and considerations *now* less than ever oppose the progress of scientific improvement, and the moral and physical amelioration of society. Appeals to the vague fears and prejudices of the public, veneration for precedent, and respect for the mere sanctions of time or custom or fashion, are found but shallow substitutes for sound reasoning. Calumny and detraction are not now received as logic, nor personalities and abuse as arguments. Such weapons are repudiated by a good cause, and fail to bolster up a bad one. The zeal of party only stirs up the angry passions of human nature. The zeal of science, on the contrary, nurtures the amenities of conduct, and reproves the asperities of controversy.

"These reflections are suggested by the reception and progress of the Water Cure. This great innovation on modern practice, at variance with established usages, and opposed to long dominant prejudices—neither suggested by the lights of science nor imported from the seats of refinement—has nevertheless happily emerged from the ordeal of ridicule,

misrepresentation, and abuse, which it is the fate of all new remedies—if not of every boon of humanity—to encounter. The indifference that for a while induced neglect, and the prejudice that repelled investigation, have given place to a dispassionate inquiry into matters of fact, and to that moral greatness that stoops to confess, and retract its error. Discussion has only confirmed the merits of the new treatment, and settled its pretensions on an impregnable basis. Its claims, extensively to diminish the sum of human suffering, have been substantiated, and the result is, that it is now as widely diffusing its benefits as are the wants of society it meets, and the defects of medical practice it supplies.

"The voice of experience, and the researches of the philosopher, alike unite to justify this popularity. A "great cloud of witnesses" has arisen up in its behalf, not only on the continent of Europe, but in our own country, trophies of its power to cure when all the usual resources of the healing art, in the most skilful hands have failed. *Deception has not been, and could not be practised.* The New Treatment *is not carried out in a corner, but in the open light of day, and challenging the investigation of all men.* The darkness, mysticism and manœuvre, in which quackery hides its head and enacts its deeds, have no part in it.

"The derision thrown upon the external application and internal use of cold water as a remedial agent, could only originate in an utter ignorance of the true principles of physiology, and of the objects and *rationale* of a philosophic treatment of disease. The processes of the Water Cure moreover are reducible to a sounder scientific system, and are more in accordance with the latest discoveries regarding the phenomena of healthy and diseased actions, than the uncertain, contradictory, and random practice of physic. If the doctrines of the schools therefore are to be the guides of practice, the Water Cure, as being in stricter conformity with physiology and pathology, has greater claims to the favor of the public, and the confidence of the physician.

"The professional opposition to the new treatment is gratuitous, alike without grace and without reason. The same cold water applications that pretend to shock as dangerous innovations, are but the revival of obsolete practices once in vogue in our own country, in Germany, and in the south of Europe; and are but an enforcement of the recommendations of modern chemistry. The sanguine predictions of Dr. Currie and his coadjutors, are now being realized. The practice of the professional censors of Priessnitz and his professional followers, only differs in *degree*, not in *kind*.

"The dangers of treatment—the risks arising from defects of judgment, clearly preponderate on the side of the old practice.

"In drug-medication, errors of diagnosis are often fatal; in the Water Cure they are always innocent. In the treatment by medicine, *present* disease is often removed by sowing the seeds of *future* malady; *temporary* relief is often bought at the expense of *permanent* inconvenience; healthy action is not unusually *restored* to one organ by *taking it away* from another. These results cannot occur in the Water Cure. Drugs attack the constitution through diseased localities; the Water Cure attacks

diseased localities through the general constitution. In the one case the organ to be attacked is left to nature ; in the other it is selected by art. In the Old Treatment, the *wrong* organ is sometimes chosen for attack, and the *fons malorum* exasperated ; in the New Treatment, the wants and resources of the constitution call forth the efforts of nature in the right direction, and limit the extent of her operations. In drug medication the result of unsuccessful practice is worse than no treatment ; for functional disturbance is often aggravated into organic disease. In the Water Treatment, where a cure is not accomplished, the disease is not exasperated but always mitigated. The Water Cure is always consistent with its own principles ; the drug medication often wants principles altogether, or runs diametrically counter to them. The one has many remedies, all of them uncertain ; the other boasts of but one, and that simple and efficacious, the *mode* and *dose* of the remedy determining the kind of action. The administration of medicine is guided by the uncertain rules of art ; the practice of the Water Cure is a close imitation of nature. In the drug treatment the *remedy is abhorred* ; in the Water Cure it is enjoyed ! the first chill and shock of the bath being followed by the glow and reaction of invigorated vitality.

"The imperfections therefore of the old system give room for the improvements of the new, and justify the preference of the more efficient remedy.

"The non-accordance of the Water Cure with the received therapeutical canons of the schools, is no valid criterion by which to test the merits of the new system. The medical treatment of diseases, in fact, is overlaid with fallacies. What between the proverbial errors of diagnosis—the mistake of morbid causation, and the temptation to be misled by hasty conclusions ;—what between the almost universal adulteration of drugs, or the spoiling of them by accident, or errors of chemical manipulation ;—what between the disagreement as to their doses, and the uncertainty as to their operation ;—what between their modified action as affected by age, constitution, temperament, habits, diet, season, climate, &c., there is no certainty of prescription, no accurate calculation of results, no exact appreciation of cause and effect. Wherein, for example, have the triumphs of German Spas and our own mineral waters been most trumpeted forth ? In dyspeptic, nervous, and hypochondriacal disorders, complaints which drugs can never cure, and which are greatly influenced by adventitious causes, as mental emotions, social circumstances, the anxieties of business, confined air, late hours, luxurious dinners, and bodily inactivity. But at Spa business is laid aside ; the patient lives by rule, keeps early hours, continues most of the day in the open air. The result is the speedy re-establishment of health. Medicine and medicated water gets the credit, while in fact the cure is brought about, not in consequence, but in spite of the treatment ; and the patient has really been benefitted to the extent that he has been unconsciously put under the discipline of the Water Cure. And inasmuch as the full processes have not been carried out, the patient, in a majority of cases, is but only partially 'patched up.'

"Clean cold water is the only physical agent that exercises the most certain, safe, and salutary control over all the functions of the living organism. It most effectually and speedily quells inflammation, subdues fever, opens the obstructed pores, maintains perspiration, and soothes morbid sensibility. Pure water, pure air, and plain food, with water (simple or saline) variously applied to the skin, in conjunction with active bodily exercise, are the great sources of acquired health, and the means of throwing off disease. For it is neither physic nor the physician that heals; neither drugs nor cold water can remove the proximate cause—the material conditions of the disease. The Inherent Conservative Powers of the Living Organism are the only agents in restoration. The aim of all scientific treatment must be, to give the fullest scope and highest activity to all the vital and vegetative processes—to second the efforts of nature to throw off diseased action—to counteract disturbing agents, or to eject them from the economy.

"Animal life, according to the incomparable researches of the first of living philosophers, Liebig, consists in the transformations effected by the various combinations of the elements of food and oxygen. The processes of the Water Cure bring about more efficiently than any other means these favourable conditions. The appetite is speedily improved; the exercise is increased proportionably; the elements of the transformation in question are afforded in greater quantity. The result is, an exaltation of vitality, whereby the powers of the system have full play for the work of altering morbid conditions, breaking up obstructions, restoring secretions, and eliminating diseased secretions from the system; thus producing more rapid transformations, renewing the blood, and compacting the solids by healthier depositions of new material.

"The diseases wherein the Water Cure achieves its greatest triumphs have hitherto been the opprobrium of medicine, and of its professors. These are, the protean class of nervous disorders, the so-called stomach and bilious complaints (organs more sinned against than sinning), the host of anomalous and nondescript ailments, the results of the excessive wear and tear of the body and mind, produced by the competition of business and the collisions of modern society, chronic gout and rheumatism, scrofula, syphilis and mercurial diseases; the causes and physical conditions of apoplexy, palsy, general vitiated habit, &c.

"But the power claimed and possessed by the new treatment, of exalting the energies of the living organism, is not to be applied indiscriminately, immoderately, or in a routine manner. The age, temperament and constitution of the patient—the season of the year—climate—the nature, seat, and source of the complaint—are the guides of the mode of treatment, and the measure of its extent. It is also to be distinctly remembered, that the Water Cure is chiefly applicable to functional disorders, and not to organic diseases. And it is a consolatory fact to know, that in cases of confirmed indigestion, bilious and liver complaints, nervousness and hypochondriasis, organic disease is of comparatively rare occurrence.

"The alleged danger of the crisis is a mere chimera—a phantom conjured up to terrify the weak, or to stagger the strong. Properly to apply, however, the processes of the Water Cure—to ensure at once the safety of the patient, and the success of the remedy—it must be in the hands of a practical physician, intimately versed in the sound and morbid structure of man, and possessing habits of careful observation of disease, accurate diagnosis and profound reflection. The amount and kind of treatment necessary in a given case, is determined by the existing bodily condition, as deduced from a strict interrogation of all the functions, and a faithful investigation of the previous history of the disease. In this way alone can the precise nature, seat and extent, of the internal derangement be known, and the amount of constitutional power wherewith to throw off morbid action be determined.

"The condition of treatment, as regards the patient himself, is to withdraw the organism as much as possible from all sources of unnatural or excessive stimulations. For this reason, repose of the passions is necessary; the turmoil of business and the excitements of study are to be avoided; all dietetic stimulants, alcohol and fermented liquors, are eschewed.

"The Water Cure, when adopted by the profession generally, will be the death blow to quacks and quackery. The concoctors of the various humbugs, to be expected in such a country as this, have now seen their best days; and it is to be expected that a more honest set will succeed them. The trading speculators in the Water Cure and their doctor servants, real or pretended, are not excluded from this category.

"So far as great names give a sanction to a system, the Water Cure is not without some of the most eminent in science and the most distinguished in practice. Not to mention a host of physicians and professors on the continent, with the illustrious Liebig at their head, it may be enough to cite some names of well deserved note in our own country—Sir Charles Scudamore, Drs. Wilson, Gully, Johnson, Adair, Crawford, Hume, Weatherhead, Freeman, Smethurst, Heathcote, Mr. Herbert Mayo, Mr. Courtney, Mr. Abdy and many others. The French, Prussian and Austrian governments have now given their public approval to the system, the reports of their respective commissions sent to Graefenburg to investigate its merits having given a favourable verdict.

"A remedy that has proved so potent in untrained and unskilled hands, affords a legitimate prospect of much greater success, when wielded by men of cultivated minds and devoted to the practice of the healing art."

Of JAMES MANBY GULLY, M. D.

"In order to make more clear the views which observation has led me to adopt concerning the mode of action of the Water Cure, and which I have advanced, I will recapitulate the subject of each of the foregoing numerical heads, which are all connected by a chain of experience and reasoning.

"I. The power of nature is advanced as the only truly curative power.

"II. The Water Cure is shewn to be that form of medical art which is best adapted to aid nature in her curative efforts, and the least liable to interfere with and thwart them.

"III. The first step towards aiding that power of nature, is to withdraw from the organs all mental and bodily irritations. This constitutes the *negative* means of the Water Cure.

"IV. We here enquire the seat and centre of that power of nature which is liberated from oppression, and excited to action, by the withdrawal of mental and bodily irritants. And we find it to be in the ganglionic system of nerves dispersed throughout the body, but having its central portion in the viscera, which are thus the sympathizing centre for all diseased actions in the body.

"V. Hence it becomes essential, in applying the Water Cure in chronic diseases, to enquire minutely into the organic condition of the viscera. And we find that to be a condition of excessive blood, in the shape of chronic irritation, inflammation, congestion and obstruction.

"VI. It therefore is of consequence to avoid the means which tend further to increase the quantity of blood in the viscera, and to employ those which tend to bring it from the viscera, towards those organs which, in consequence of the excess of blood in the viscera, have been deprived of a sufficiency of it. This is especially the fact as regards the skin, the vitality of which is the most seriously compromised by the internal congestion. To the skin, therefore, the second series of means are applied; these are the *positive* means of the Water Cure.

"VII. Treats of the organic power of the skin, its connection by ganglionic influence with other parts, and how it acts directly upon the viscera, and indirectly on them through the brain.

"VIII. The viscera, liberated from oppression by the negative means, and aided by the positive means of the Water Cure, acquire sufficient power to rid themselves of their excess of blood by sending it towards the skin, and by outpouring of secretions from the stomach, liver, lower bowels, &c.

"IX. The removal of internal irritation, congestion, &c., by these means, enables the nutritive viscera to form better blood and better solids, and by means of these solids to effect and maintain a better distribution of the blood of the body.

"X. Whilst the blood is thus being better distributed and formed of a better kind, the elimination of the old morbid blood is being effected by another means of the Water Cure, namely, water drinking. This it does by expediting those chemical changes of the body, which are known to take place under the influence of the vital organic power of the body, and which in a certain time change the whole of its fluids and solids. Air and exercise, other positive means of the Water Cure, assist in these chemical changes. These means therefore should be applied according as the disease to be treated implies mal-distribution of blood alone, or that, with the addition of diseased blood. It is in this latter case, that they are more particularly and largely demanded.

"XI. Making its first impressions therefore on the nutritive or gan-

gliconic system of nerves, the water treatment in its ultimate action has a triple result—to cause a better distribution of blood, to induce the formation of better blood, and to purify the blood. These stand in cause and effect as they are mentioned; the better distribution leading to better blood making, and this giving the body power to sustain the increased waste which is requisite to purify the whole mass of blood. A visible evidence of these results is sometimes exhibited in the form of a crisis, but this is not essential, and the treatment which tends to cause it is for the most part better postponed for one less vehement in character, although equally efficacious in result.

"Regulated by these views of the action of the Water Cure, I have found it a safe and successful mode of treatment in a number of chronic disorders, the major part of which are mentioned in this volume. I fear that my views, and the practice founded on them, will be considered heterodox by those who are of opinion that water cures everything and can possibly do no harm; who therefore prescribe pretty nearly the same routine of violent processes and huge water drinking to every patient, whatever his malady or his organic condition; who in short are "*water doctors*" and nothing more. But this is not to be controlled. Facts have stared me in the face for four years, which demonstrate the possibility of avoiding a great number of disagreeables by a scientific adaptation of the appliances of the Water Cure to the organic capabilities of each patient, and of arriving at a successful termination quite as surely as if the patient had been all day in water, and water all day in him. Besides, it is folly to suppose, that improvement is never to be made in this mode of treating disease; that as Priessnitz originated it, so it is to remain through all time.

"Priessnitz is far too clear in mental vision, and original in thought himself, to stick fast in one routine, for in the course of his long experience he has considerably varied his practice, and it is satisfactory to know, that now, after more than twenty years' experience, his treatment has lost almost all the violence which characterized it in former years, and that he too, finds he can do as much with much milder means. With keenness to observe, he has the tact to adapt his practice to the facts which observation imposes on him. Not so the small persons, who run over to Gräfenburg for a few weeks, and return to practice the same processes on delicate Englishwomen and Englishmen with sensitive and care-worn brains, which they had there seen practised on phlegmatic Germans and hard headed Poles, and who, though they fancy themselves *Priessnitz*, and come back '*Doctors*,' are in reality as much one as the other. From such I am compelled to differ in my ideas of the best manner of applying the Water Cure, and I am also compelled to hold, *that its employment requires as much nicety and determination as any other plan of treatment, and may not safely be trusted to a routine. Knowledge of sound physiology and pathology are never more required than in the practice of the Water Cure, and in no system of treatment will the great truths of those sciences find more ample and beautiful confirmation.*"

Opinions of JAMES WILSON, M.D., of Malvern, England.

"Amongst my earliest recollections, are those of my mother giving medicines and lotions to the poor; she was a kind of Lady Bountiful, and I can distinctly recall, when I must have been about five or six years old, a side table on which there was something like a soup plate piled with pence; and by its side lotions, draughts and pills; these were for the poor. She was the most tender of mothers, and with the best intentions, I was very nearly spoilt by indulgence and physic. I never could ascertain the fact, but I have little doubt but the first thing that greeted my unfortunate stomach on entering into this 'wicked world' was a dose of castor oil. To this day, port wine reminds me so strongly of powdered bark that I dislike it; and black currant jelly is still my aversion, for the very name brings with it visions of rhubarb, calomel, jalap and ching lozenges. By this system of management, at ten years of age I was a juvenile dyspeptic, with a nervous system already morbidly excited, reading works of imagination with avidity, with an irritated brain and slightly inflamed stomach. At fifteen I had lost my parents, and may say was without controul. I entered the medical profession, and for more than seven years was seldom absent from the hospital or dissecting room; this, combined with every inattention to diet and exercise, and taking at the same time stimulants and medicines of every kind, considerably advanced the stomach and nervous complaints which had been commenced in my infancy.

"After taking my degrees, I allowed myself no interval of rest—the worst possible economy of time I could have adopted—but purchased half of a large practice in London, entering into a partnership—midwifery forming a part. For about seven years I was actively engaged in this, with as little attention as ever to diet and stimulants. By this time I had become really an ailing man; I was always on the physicking list myself; the dressing table was covered with pill-boxes and various draughts always ready. Day after day came the melancholy debate, whether it would be better to take the compound rhubarb or the compound colocynth pills, with or without the blue, or would it not be better still to try the 'cold drawn' (castor oil), or rhubarb and magnesia. This irritating contention generally ended in my taking what, from my feelings of discomfort, I afterwards thought was the wrong dose. The truth is, all was wrong. As may be guessed, I consulted all my medical friends, and gave their methods a trial. I rubbed in tartar emetic till I had a crop of boils, 'the plague of Job' without the patience, and took mercury until my breath was fetid, and my gums sore. By this time I had established some serious diseases; I had a stomach and liver complaint with chronic duodenitis, an inveterate skin disease, and tic douloureux. My nerves were completely shaken, accompanied with despondency and nervous apprehensions, and irritability beyond bearing. I was indeed an old man before my time; I understood Ecclesiastes, and felt that 'all was vanity and vexation of spirit.' In this deplorable state I abandoned London, and for several years wan-

dered about the continent, passing my time principally in Germany and Italy; I consulted all the leading men in most of the capital cities of Europe, and was still no better. I read again and again every work that could enlighten me on my complaints, and ended from personal experience and conviction in *giving up medicine*. A few leeches, with warm fomentations and dieting, afforded me more relief than anything; in fact I believe these last remedies preserved me. My ailments for a long time had become a morbid study for myself, and I am now persuaded, that except for closely observing the phenomena of disease in my own person, I never could have understood many nervous complaints, and the real properties of many drugs. There are many men of talent and great experience, who from getting into a routine, and having nerves of iron and the digestion of an ostrich, cannot trace the connection of many painful diseases, or be persuaded of their source; they overlook some of the most real and distressing complaints, or call them fanciful. At this period I had heard of the Water Cure, and soon afterwards a work on the subject fell into my hands. Having long contemplated such a thing, I thought I understood it, and at once decided on a trial. I should mention, that for more than twelve months before I went to the Water Cure I had rejected my dinner three or four times a week, not from sickness but from the distress I experienced some hours after taking it; there was also inveterate constipation. I was very thin, and my calves completely gone. It was altogether fifteen months before I was perfectly cured of the skin disease, that being the last to disappear.

"During nearly ten months that I remained at Gräfenburg, I pursued the treatment with great diligence, and at some other establishments afterwards more lightly. It consisted principally in the wet sheet, packing shallow bath, sitz bath, and sometimes the douche. The compress on the abdomen being also regularly worn, as well as a compress on the skin disease as far as I could manage it. During the first three weeks of my treatment I suffered from the water turning excessively acid, and from my being sometimes obliged to reject it; but towards the end of the month a good appetite set in, after having been for years without the sensation. I soon got to relish hard cow beef and veal a day old, with all the *et ceteras* of the Gräfenburg table, caring more for the quantity than the quality. In the third week I had a sleeping attack, which lasted for about six days; I nearly fell asleep on my walk, and was frequently obliged to lie down and sleep two hours before and two hours after dinner, and to go to bed at nine in the evening. At the expiration of the fifth month I had gained *sixteen pounds*. In the midst of this a crisis of boils appeared on the right leg, and the pain in the right side over the liver, which was still distinctly felt on pressure, was remarkably relieved. There was another curious result; two years previously I had contracted at Naples an irritation of the lachrymal gland of the right eye, and from that time, as soon as I went out into the open air, I could throw as many tears as I pleased out of the eye by a jerk of the head; it had never stopped, though I had tried several remedies. I soon however observed that it was aggravated when my stomach and duodenum were worse. The

state of my eye had been remarked by many of my fellow patients, and it created a little sensation when I appeared without tears, or the usual white handkerchief which I had always in my hand to apply to the eye. It stopped suddenly the day after the crisis, and many came to look at 'the cure of the English doctor's eye.' In ten days it returned, and ran as badly as ever, and the handkerchief was again in constant requisition. This failure produced despondency in many hypochondriacs, who were zealous in pointing out to others that my eye was as bad as ever, and that the Water Cure was after all good for nothing; however a fortnight after this disappointment I had another eruption of boils on the liver and leg, the tears were again dried up and they have stopped from that day to this. The dull pain also, which for seven or eight years I had felt more or less in the right side, also disappeared. The skin disease however was still there, although the itching was materially diminished, and the skin much less hard and leathery. I was told from the first that this would be a slow business; I persevered, and at the end of fifteen months the surface of the skin was smooth and without blemish. My colour had become healthy, and I had gained *thirty* pounds of flesh.

"During the time I was going through the cure, the quantity of water I imbibed averaged twelve half-pints a day. On one occasion I drank thirty tumblers of water from the spring before breakfast; I was perfectly well all the day afterwards, and felt no effect further than an irresistible appetite. I was making a variety of experiments at the time, having become quite well, and this was nothing more. I do not think it would be advisable for patients to repeat such experiments. The compresses worn on the stomach at one period of my treatment, at intervals used to be covered with a deep blue secretion, at other times it was thick and glutinous; I also had a severe attack of fever. The evening that I removed from the Gräfenburg hill to the little town of Friwaldou and had just got into bed (having a crisis upon me), the town was on fire. The wind blew a gale, and the wooden houses and roofs carried on the fire like a field of dry reeds. The whole thing was so sudden that I had to throw my traps out of the window and hurry out. After being up all night and wet, the next day I found myself in a burning fever with intense headache, and pain in all the limbs. I immediately turned to, had four wet sheets running for a quarter, half and three-quarters of an hour each, and then a shallow bath; in three hours I repeated the process and again before ten at night. The following morning I was better, but had still headache and fever. I went on with the treatment, and on the third day was out and well, hungry and hearty. I then heard that Priessnitz, who had been wet to the skin all the night of the fire, had also an attack of the fever, and had been passing his time, as I had been, in wet sheets. I have no doubt he felt as safe, comfortable, composed and refreshed as I did in this great and merciful discovery.

"Some time after this, I had intense jaundice from the passage of gall stones; a lady observed, 'that I looked like an orange in a white pocket handkerchief.' I lay an hour twice a day in the wet sheets, with sitz baths, shallow baths, compress and fomentations; the sheets and com-

press were tinted yellow. The skin was clear again in ten days, and the relief I experienced from the different processes very great. Twelve months last autumn I had a severe attack of influenza, and many in this village were laid up with it; wet sheets again, with the accompaniments, and I was enabled to visit my patients regularly, without an hour's confinement.

"It is now three years since I have taken a dose of medicine, and in the interval have done some hard work in fulfilling my vow, to aid with all my means in establishing the Water Cure in my native land; added to which I have endured no small amount of irritation, misrepresentation and abuse; nevertheless I am quite well, and with the blessing of Providence trust to continue so, and to have as many patients to attend to as will be consistent with my self-preservation. Under these circumstances, would the gentle and candid reader advise me to abandon the WATER CURE and return to the practice of medicine?

"It is imagined by persons who have not witnessed the operation of the water treatment, that some of its means are attended with danger. It is supposed that weak persons, and delicate constitutions, are unable to undergo the operation without injury. Nothing is more groundless than this fear; many thousand persons are annually submitted to its application in the various establishments of Germany. Among them are individuals of every age, of both sexes, of all varieties of constitution and temperament, presenting every possible gradation of physical power, even to the most infirm, and labouring under every description of disease. Among this large number, which comprehends every diversity that the human frame is capable of presenting, accidents are much less frequent than under any other mode of treatment: indeed, they are almost unheard of. Let it not be imagined that the Water Cure is disagreeable, or that the patient has anything to 'go through' in submitting to its operation. When its use is once commenced, when the skin has overcome its first sinking from contact with cold water, and the glow of reaction has been once experienced, it will not be pronounced painful or unpleasant. On the contrary, it is exceedingly agreeable. It is the most common of all events at hydropathic establishments, to hear patients speak of their delightful sensations; and if chance occupation or absence prevent the taking of a bath at the usual hour, the loss is always regarded as a deprivation of one of the principal enjoyments of the day.

A drug is a substance capable of exciting a change in the organs or functions of the animal frame; the term comprehends all substances answering to that definition. There is therefore considerable truth in the remark of Dr. Frankel, (*Aerztliche Bermerkeingen*, &c., p. 7., et seq.) that water, as employed by Priessnitz, is as powerful as any drug in the pharmacopœia, since it may be stimulant or sedative, tonic or depressing, astringent or aperient, sudorific, diuretic, &c., according to the manner of its administration. Thus far there is a similarity between water and drugs, but there the resemblance ceases; they are essentially different in the fact that water is always harmless, whilst most drugs are more or less

injurious in their immediate or subsequent effects. To satisfy our readers of this latter truth, it is sufficient to enumerate the names of arsenic, opium, turpentine, prussic acid, corrosive sublimate, calomel, fox glove, hemlock, henbane and iodine, as drugs frequently employed in medical treatment.

"Besides the injurious properties of drugs themselves, the public are exposed to another, but no less serious danger, from peculiar methods of administering them. Thus we find one man professing to cure a class of diseases by a remedy which another pronounces poisonous. (Christison on Poisons, Art. Digitalis.)

"The nauseous qualities of drugs is another objection to their administration. There is no doubt that much mischief is often perpetrated by the disgusting doses which are forced upon children and patients in a prostrate condition, as, for instance, in the last stages of fever.

"A fourth reason for endeavouring to find a substitute for drugs, is, the uncertainty of the benefit of some of those most commonly exhibited.

We find nation disputing with nation on the use of a drug, as if they were discussing a point in politics, or any other department of science in which assertion, and not proof, is the manner of arguing. (Compare the treatment of thoracic inflammation, by Lawrence, with any English writer on the same subject; particularly with reference to mercury. See, also, Hope on the Heart, where he says, speaking of the established treatment of aneurism, '*I would rather take the chance of the disease than the treatment!*')"

"The fifth and crowning objection to drugs, is, that they are generally useless. All their beneficial effects may be obtained from water. The two following facts will illustrate this statement:—

"An English gentleman, of the writer's acquaintance, suffering from a painful disease, had been in the habit of frequently taking opium to procure relief. After the second day of his residence in a hydropathic establishment he was able to relinquish this habit entirely, although at that time his malady was not otherwise improved.

"Another English gentleman, many months a companion of the writer, had taken active doses of purgative medicine nearly every day, for a year, by the advice of an eminent London physician. He was affected with 'torpor of the bowels and liver.' He went to a water establishment last summer, and has not taken a dose of medicine since. His bowels are now perfectly regular. What drugs effect by a violent local action, water effects by its healthful influences upon the system in general.

Of Drs. MUNDE, OERTEL and HIRSCHEL.—By F. GRETER.

"By what means does water act upon animal organization?

"This is now the question, and the answer will be, that it is done by its solvent power and its freshness. 'Water,' to use the words of the deserving Dr. Hahn 'is among all fluid bodies, best adapted to enter into the finest arteries, fibres, and nerves of the human body, nay, into the

most minute capillary vessels scarcely visible through the magnifying glass, and to move therein. As these are constantly in need of a supply of fluids if they are not to exsiccate and to collapse, it is water which we can and ought to make use of for replenishing the body, and keeping it in its natural state, and in young people for its growth.

"It acts by dissolving and dissipating, and thereby prevents and dispels those disquimations and obstipations which arise in consequence of a sedentary life, of too nourishing diet, and after partaking of too rich and indigestible viands.

"It furthermore takes away the destructive power of those acrid juices which develop themselves in consequence of dissipation, of indulging in unhealthy and heating beverages, and the mad enjoyment of sexual appetite.

"Its dissolving and attenuating power alone would, nevertheless, be unable to produce these effects, unless at the same time water showed its enlivening, refreshing and strengthening efficacy by means of its coolness.

"Warm baths may be most beneficially used in many kinds of sufferings, and experience speaks in their favour; but for preventing diseases, for the bracing and roborating of the body, for hardening ourselves, fresh water is the most excellent means,—nay, it is this cold water which more than all artificial productions, improves and preserves the freshness of life, that fundamental condition of *beauty*. It is the simple exercise in open air, and the enjoyment of fresh water, presented by the near well, which renders the families of farmers and working men in the country so much more blooming and healthy, than the children of the richer inhabitants of cities, spoiled by coffee, tea, and other luxuries. Water gives appetite, even for simple, cheap and coarse food; and the old proverb 'salt and bread turn the cheeks red' is true, as far as the drinking of fresh water is not neglected.

"Water taken into the cavity of the mouth, which it refreshes and purifies, shows its beneficial influence by strengthening the gums, and keeping them from becoming loose, by washing from off the teeth remains of food and other impurities, and preserving them white, firm, healthy and sharp. Running down along the sides of the jaws and the œsophagus, it strengthens these parts, and lessens the disposition to inflammation and mucous coatings, &c.

"Arrived in the stomach, it first unfolds its purifying, thinning, dissolving and strengthening qualities. As it dissolves the food, and prepares from it a good alimentary juice, so it also dissolves every thing useless and noxious contained in salty, earthy and sulphureous substances, and expels them in vapour, sweat and urine. Whilst its pleasantly cooling property renders it the most appropriate drink against thirst, it is at the same time the most excellent means for promoting digestion, and preventing obstructions and constipations.

"It furthermore refreshes, animates, strengthens and purifies the bowels, heart, lungs, liver, kidneys, &c. It procures for the blood and all the juices an equal and free passage through all the vessels, even to the smallest tubes in the ways of secretion. It forwards and effects usually the excretion of everything useless and injurious.

"By an unobstructed digestion, and a regular circulation of blood, of course, all the muscles and nerves are invigorated; in short, all vital and bodily functions obtain, by means of cold water, a free and regular course, and thus health, the harmony of all the functions of life, is improved in the whole system.

"Various means from all the realms of nature, simple and compound, have at all times been recommended as preventives against diseases, but there are no specific preventives upon which you can unconditionally rely. It is temperance and drinking of water, which, united with bodily exercise in open air, produce that serenity of mind, and impart that vigor of body, which are the best safeguards against those hostile powers called diseases; and which, but too often, are nothing but mediate or immediate consequences of the neglect of the laws of nature, pointing out a simple mode of living, and drinking of water.

"Water has this preference before other remedies, that it benefits every age and sex.

"Next to the milk of the mother, water is the best nourishment for the suckling—for the mother, herself, the best beverage. When the mother can give no suck, water, with fresh goat's milk, is preferable to all tea-decoctions. Drinking of water, and frequent bathing, united with the use of open air, most surely prevent rickets, scrofulas and the declining of children. Parents that constantly have the tea kettle over the fire, and hope to quiet the crying children by means of warm tea, will experience just the contrary result.

"For boys and girls, drinking of water and cold bathing is the purest source of vigorous life and beauty.

"Growing young men ought to flee intoxicating liquors, and especially brandy, like poison; it makes them miserable, weak and stupid; and warm, heating drinks, make them voluptuous and sensual, or relax and spoil the beauties of the skin. Water gives strength and good spirits.

"Mature age is more inclined to inflammations, old age, in both sexes, to obstructions; and against these very evils an appropriate use of cold water, with a regular diet, proves preventive and salutary.

"With regard to the different temperaments, cold water promotes the circulation of blood in the viscous and mucous *phlegmatic*. It dissolves and dispels the stuffs and obstructions which render the life of the thick-blooded *melancholy* one a torment. The *choleric*, suffering with a vicious secretion of bile, has his great heat moderated by it, is assisted in his secretions, and has his irascible and effervescent temper quieted; and to the *sanguine*, it imparts that equanimity which best guards against excess and rashness.

"Thus it operates also upon general morality; and the happiest and most innocent nations of antiquity were water drinkers, amiable in peace, and strong in the defence of their country. Without entering here upon the domestic and economical advantages, it may safely be advanced, that morality and temperance, fundamental virtues in the life of families as well as nations, and conditions for the development of all mental and bodily powers, will be equally promoted by the increasing use of cold water.

"The house well, or neighbouring spring, will impart health and welfare, and become even the source of wealth, whilst the rivulet or river will refresh youth and old age, and brace them by the healthiest of exercises.

"We cannot conclude without casting a particular look upon manufacturing districts, and all conditions of life that imply a sedentary occupation. In the enjoyment of water, the industrious and poor working man or factory girl, the designer or painter, &c., closely confined for long hours, find refreshment and strength. The cup of fresh water secures to the seamstress or embroidress employed in lace and muslin, equally exciting her eyes and chest, strength, beauty and hilarity. Good coffee is indeed a stimulant and animating drink, but by frequent use weakening the more. Let every working person, in particular the sedentary, drink water frequently, and apply daily ablutions, and they will prevent manifold sufferings.

"Bathing is a constituent part of national education, and ought, particularly in populous places, to be cultivated among the gymnastic exercises of youth.

"Its effect manifests itself especially upon the skin. The skin is the natural dress of man; the covering in which he walked innocent and harmless in paradise. It not only serves him as a cover, and protects him from influences from without; but it is at the same time the seat of the sense of touch and feeling, the most comprehensive of all senses; as the ends of the nerves—organs of sensitiveness—as well as the yielding and absorbing mouths of arteries and veins, terminate in the numberless little vessels of the skin.

"By the millions of little openings (pores) with which it is thickly sown in every part, the finest fluids, useless for the nutrition of the body, are removed. If these fluids should remain in the body, various diseases would be the unavoidable consequence. The better the evaporation proceeds, the more open the pores of the skin, the less we have to fear from rheumatisms, catarrhs, and other evils—nay, it may be explained how the most dangerous diseases can be obviated in a short time, by a strong and copious perspiration.

"But in what other way can these evaporating pores be kept so free and open, and this cutaneous life be preserved so beneficially as by a regular purification with fresh water in washing and bathing?

"It purifies,' to use Hufeland's words, 'not merely the skin, but freshens and exhilarates soul and body; it strengthens and preserves against the changing influences of air and weather; keeps the solid parts supple, and the joints pliable; it preserves the vigor of youth, and keeps off the debility of old age.' It is a precious means for preserving health when used with the necessary precautions.'

"Swimming, particularly up stream, is a healthy and useful exercise. The stay in the bath of cold water may last from five to fifteen minutes.

"For the *female sex* baths are not less useful. *Cold baths and washings* are the best *cosmetics*; they give strength to the skin, redness and freshness to the cheeks and lips, invigorate the growth of the hair, and impart to the muscles that fullness and roundness, the fundamental condition of health. Therefore the establishment of public ladies' baths would be of signal importance.

"Bathing in cold water, although in the beginning, perhaps, disagreeable by chill and even oppression of the chest, soon produces a beneficial warmth, and a feeling of internal strength and comfort.

"Russia gives here a fine example, and the pure tact of the people ensures decorum. Both sexes use at different hours the same bathing place; and the holy feeling of decency watches the baths of the women.

"Mothers in particular, ought never to neglect bathing their children. It is the surest means of preventing crippling, rickets, scrofulas, itch and vermin. Every tub will afford the opportunity, and the watering pot, moistening and refreshing the plants, will show the same effect upon children. In some degree, the bath may be supplied by washings with cold water, whilst the cases, where warm baths are preferable, will be indicated by the physician."

Observations on Hydropathy, by EDWARD JOHNSON, M.D., of Stanstead Bury Hydropathic Institution, England.

"It is now more than three years since I went into Silesian Austria for the purpose of witnessing the details, and ascertaining the merits of what is called the Water Cure. Ever since that time I have been constantly engaged in practising it, and have had ample opportunities of testing its efficacy in a number and variety of cases; and it is my intention here to detail the *results of my own observation and experience* with regard to the remedial powers of this peculiar treatment.

"When it is considered that this treatment consists mainly in the frequent use of cold baths of various kinds—in restoring and promoting the natural functions of that much neglected organ, the skin, by frequent sweating under accumulated bed clothes, and by the wet sheet vapor bath—for the wet sheet is neither more nor less than a very neat, convenient and mild vapor bath—in almost constant exposure to the healthful influence of a salubrious air—in strict attention to diet—in daily systematic exercise on foot or on horseback, or both regulated according to each patient's strength—in complete mental repose—in early rising and early retirement—the absence of all unwholesome causes of excitement, &c. &c. When this is considered, and when it is further remembered that every one of these things *separately* has always been strongly insisted upon by all medical men of all ages, as highly conducive to health, and possessing a certain amount of remedial power—when, I say, all this is remembered, there will scarcely be any, I think, who will not acknowledge that this treatment must possess at least some degree of remedial virtue. For if each of the several parts of which the whole treatment consists, be acknowledged on all hands to possess in itself a curative influence, certainly, when they are all brought to bear upon the system at one and the same time, this curative influence cannot be diminished, but must, on the contrary, be vastly increased.

"The whole treatment, however, is neither applicable to all diseases, nor can it be safely administered to all constitutions. Neither can it

ever supersede the legitimate use of medicine, or the lancet ; nor would I admit into my house any person who would not permit me to have recourse to these, should any sudden emergency or undomestic occasion arise, which, in my judgment, called for their use.

" But that there is a very large number of diseases, and diseased conditions, in which drugs are worse than useless, but which can be perfectly cured by this treatment, I am as certain as I am of my own existence. And this fact I am about to demonstrate, by the publication of certain cases, with names and addresses of the persons in whom they occurred. These nineteen cases, incontestably authentic as they are, are just as efficacious as nineteen thousand would be, to prove that the treatment by which they were cured does possess a *certain amount* of curative power. The great questions are, therefore, what are those particular diseases to which this particular treatment is not applicable ? and what, in these cases, is its *amount* of curative power ? Is it greater or less than that of drugs ? and what advantages has this mode of cure over that of the old method in those diseases which are capable of cure by *either*.

" I have said, the *whole* treatment is not applicable to all diseases, and all constitutions ; but I may safely add that there is no disease to which it is not applicable in part—for there certainly is no disease which will not be more or less benefitted by attention to diet, mental repose, almost constant exposure to a salubrious air, great attention to the state of the skin, daily exercise, &c. &c., all of which constitute important parts of the treatment. *It is a great error to suppose that this treatment consists merely in perpetual sweatings and bathings*, although, when these can be safely borne, they constitute the fundamental part of it. It is capable of great modification, therefore, and must always be so modified as to suit the particular circumstances of each particular case.

" I verily believe that there is no single remedy, except the lancet, capable of conferring such signal service in acute diseases as the wet sheet. And the time must inevitably come, when medical men can no longer hold out against the use of this most simple, neat, safe, efficacious and common sense remedy. But seeing that few cases are at present submitted to this treatment, except the oldest and most inveterate—and those in which every other earthly plan has been tried in vain—it should be no great matter of surprise, if this plan also should occasionally fail. It would be, under these circumstances, a miracle indeed if it succeeded always.

" From my own observation and experience, I believe the hydropathic treatment, (by which I mean, of course, the whole treatment) when not applied with too much severity, to be in its nature essentially tonic and alterative—*permanently* tonic, because it produces its tonic effects by filling the system with abundance of new and healthy blood—by strengthening the nervous system and muscular fibre of the heart, and by constricting the capillary blood vessels, and therefore by strengthening the whole circulating system. These are effects which, when once produced, must be permanent, and not temporary, like the tonic effects usually produced by drug tonics. In a word, it *builds up and consolidates the*

whole system. And it is also alterative, because it exercises a remarkable influence in promoting and restoring all the secretions, especially those of the skin and bowels. This fact is one of the most incontestable proofs of its remedial virtues, and one, too, which must be of itself sufficient in the mind of every medical man to account for the curative influence which this treatment claims to possess.

"This treatment, which, when administered as a whole, and with a full diet, 'builds up and consolidates the body' as I have before said, can be so modified by a stricter attention to that part of it which consists in a system of dieting, as to pull down the body whenever it becomes necessary; to empty the weakened and engorged capillaries of their congested contents by cutting off the supplies. This is a sort of natural and slow bleeding, in which, however, the nutritious and vital parts of the blood are *retained*, and only its impure and watery parts are lost. The congested capillaries, it is true, may be emptied by large artificial bleedings by the lancet; but then this cannot be effected without drawing off the *vital parts* of the blood at the same time, to the manifest and great injury of the general health.

"The immediate effects of cold bathing, sweating and exercise, clearly are to waste the body; but if the stomach be well supplied with abundance of good food, the daily waste is daily re-supplied. And as the powers of digestion are at the same time always augmented, and the appetite greatly increased, the daily supply is greater than the daily waste, and thus the body is built up. But if, under these circumstances, the supplies be *cut off*—that is, if the amount of food be judiciously reduced according to the patient's strength, so that the waste exceed the supplies, then it is clear that the volume of the blood, and the bulk of the body, may be reduced to almost any given extent; and that, too, by only getting rid of such parts of the body as are not necessary to life, while all that is necessary is still retained—a sort of concentrated essence as it were—to become the foundation of the after process of 'building up,' by means of a more generous diet. It is something like beginning life afresh. Or it may be compared, in effect, to putting a man's blood through a filtering machine, and then exercising extreme caution against the introduction of impurities, until the full quantity shall have been gradually and slowly restored by an improved and well regulated diet.

"Another marked and prominent feature in this treatment is its great efficacy in allaying *morbid sensibility, nervous excitement and irritation*. It is to this that I ascribe its almost never-failing success in restoring the *suppressed secretions*. No fact in the whole history of medical science is better established than this, viz: that the immediate effect of nervous excitement is always to arrest the secretions. To remove this excitement, therefore, is to remove the arrest of the secretions—in other words, to restore them."

The following are the cases referred to before, as having been treated successfully by Dr. Johnson, at his Hydropathic Institution, Stanstead-bury, England.

1. Mr. Peel.—Disease of the hip. Restored to the use of his limb after using crutches for fifteen years.
2. Mrs. Coulter.—Abdominal abscesses.
3. Rev. E. Price.—Enlargement and chronic inflammation of the knee joint.
4. Miss Wallis.—Nervous debility, with hysteria and cramps of the stomach and bowels.
5. Mr. Foster.—Psoriasis (a scaly disease) of the whole body.
6. Mrs. Scarland.—Psoriasis of *thirty-five* years standing.
7. Mr. Gibb.—Skin disease.
8. Sergeant Lord.—Rheumatism.
9. A little boy.—Erysipelatous inflammation of the face and neck.
10. Miss Pilkington.—Dysentery.
11. Mr. Roe.—Inflammatory Rheumatism.
12. Mrs. Ackland.—Chronic Rheumatism.
13. Joseph Hayes.—Shattered constitution, and extreme debility.
14. Mr. Berdoe.—Indigestion and Constipation.
15. Mrs. Heys.—Severe sprain and sciatica.
16. E. S. Caley, Esq., M.P., N.R.Y.—Disease of the heart, liver and stomach.
17. Mr. Nettlingham.—Determination of blood to the head.
18. Mrs. Hicks.—Swollen leg.
19. Lieut. Col. B.—Acute rheumatism, obstinate constipation, and affection of the cerebral nerves.

Of course, the names of the patients and their diseases are only mentioned above. For the particulars of each case, we refer the reader to Dr. Johnson's "RESULTS OF HYDROPATHY."

"Now here are nineteen cases, whose fair and honest authenticity cannot, with any show of reason, be denied or doubted. If the number and variety were greater, that circumstance would prove a greater and more extended remedial power in the treatment; but nineteen thousand could not more effectually prove that it does possess a certain amount of remedial agency than is proved by these nineteen. Here, then, again recurs the question: What are those particular diseased conditions over which this mode of cure possesses the most influence? It must be remembered, too, that these nineteen cases are not all of them the best specimens of those which I have cured. I have not been allowed to pick and choose my cases for publication. I could only publish those which I could procure permission to publish. It must also never be forgotten, that nearly all the cases which come under this peculiar treatment, are of the oldest and most obstinate kind, and cases which had already proved themselves to be incurable by any other known means; and moreover, that not one person in twenty will give the treatment *sufficient time* to produce its full effects.

"What, then, are the diseases to which it is chiefly applicable? I have treated and cured simple palpitation of the heart from nervous weakness, and excessive irritability. I have cured some cases of hysteria, habitual spasms of the stomach and bowels, chronic rheumatism, rheumatism of

the head, psoriasis and other skin diseases, indigestion, and many painful affections depending on obscure causes.

"I have had several gentlemen from India, with constitutions much injured by a long residence in a hot climate, and the too plentiful use of mercury. Over cases of this kind, I have found the treatment invariably to exercise a most marked and beneficial influence.

I have now in my house the worst case of syphilitic rupia I ever saw ; and it is getting well with great rapidity. I have also in my house another case of psoriasis—psoriasis gyrata. The disease occupies the whole body—both trunk and limbs—and it is improving fast, although it has only been under my treatment one month.

"I have used it with great success in nervous debility, in lumbago, in disease of the knee joint, in periodical bilious attacks, in both suppression and retention of the monthly secretion, in erysipelas, in some scrofulous affections, in eruptions on the legs, in ecthyma, (a skin disease), in several nervous disorders, in various affections of head, and in a great variety of anomalous diseases which cannot be reduced to any class and which defy all nomenclature. I have also cured sciatica, depending on inflammation of the sheath of the sciatic nerve : and for habitual constipation, and all ordinary forms of rheumatism, I have found it as nearly a specific as any human remedy can ever hope to be.

"I have had several children under my care at Stansteadbury house. And I have found this treatment of infinite advantage in strengthening the constitution of delicate children with a scrofulous tendency, and of young persons in whom consumption is apprehended, but in whom it has not yet developed itself. I have the deepest and most conscientious conviction, that many thousands of lives might be saved from the ravages of this fatal disorder by timely submission, for a few months, to this method of improving, consolidating and hardening the system. Two or three cases of this latter kind I have successfully treated.

"The treatment is, as I have before said, a tonic—a natural tonic. It is also an alterative, seeing that it promotes and restores all the secretions and excretions, especially those of the skin, liver, uterus and bowels ; and thus cleanses the system. It allays nervous and painful irritations, and morbid sensibility, as is proved by Mr. Peel's case ; and is therefore an anodyne. It is perfectly compatible with any kind of medicine which any particular case may demand. It is much *more* than this, for I say, and I say it hardily, and in the most unqualified language, that if there be any drug which possesses a curative influence over any disease, the curative influence of that drug over that disease will be increased a hundred fold if its use be *conjoined* with this treatment. All my experience proves this—but my experience is not *necessary* to prove it—at least not to medical men. For as we have seen, the treatment allays fever and nervous irritability, improves digestion, and keeps all the secretions in a healthy state of activity,—and so important is this, that in order to effect these objects, medical men are constantly obliged to give their patients several other drugs, as calomel, potash, and various aperient medicines, *in addition* to the *particular* drug

which is to cure the *particular* disease for which it is administered. Thus, if a patient apply to his physician for psoriasis, that physician will probably give him arsenic for that disease. But in addition to the arsenic, he will also be sure to order him sundry doses of blue pill, extract of colocynth, &c. &c., to be taken occasionally, or every other night, in order to keep his secretions going—especially those of the liver and bowels—for the secretion from the skin is generally quite overlooked.

"In the majority of cases to which this treatment is applicable, all drugs are unnecessary, especially aperient and medicinal drugs. But yet there are *some* in which medicines may be given with advantage.

"Seeing, then, that the hydropathic treatment is in its nature tonic, alterative and anodyne—and that it is all these, my experience has amply satisfied me—to what particular class of disorders are we warranted in believing it applicable, in addition to those particular instances of disease, its power of curing which, my own practice has already demonstrated? My opinion, founded, not upon any speculative views, but solely on what I have observed of its effects, and upon a multitude of corroborative little facts which are every now and then disclosing themselves—my opinion is, I say, that it is capable of curing all that class of diseased conditions, (and it is a very large one) in which the one thing needful is, to restore the secretions, and give power to the system—all that class of diseases depending on nervous debility, and irritability, arising from an over-excited or over-tasked stomach—all disorders depending upon an impure condition of the blood—all diseases depending upon congestion of the blood—all functional diseases not depending upon disorganization, or mechanical local irritation—all local diseases which are kept up by a want of sufficient power in the general system to heal the lesion, or restore the healthy functions of the part. In constipation, indigestion, chronic rheumatism, many skin diseases, indolent ulcers, nervous debility, torpid liver, habitual spasms, many forms of headache, determination of blood to the head, suppression or retention of the monthly secretion, chlorosis, many painful affections of nerves, I believe it to be by far the most certain remedy yet discovered, and that in some of these, as rheumatism, constipation, some forms of indigestion, spasms, torpid liver, &c., it is almost a specific. When it is possible to give up twelve or eighteen months to the prosecution of this treatment, and where there is no distortion of joints, I believe it quite capable of curing the gout *completely and permanently*.

"In addition to all these, I am firmly and deeply convinced, that there are many diseases which cannot be cured by this treatment alone, but which can be cured by the two combined.

"The hydropathic treatment has this peculiar and great advantage over drug treatment, viz., that when it fails to cure the particular disease for which it is administered, it never fails to leave the general health and strength more or less *improved*; whereas drugs, under like circumstances, never fail to leave the general health *worse* than they found it.

"I believe that this treatment, when rationally practised by educated medical men, is a perfectly intelligible treatment (which the drug treat-

ment does not even pretend to be), opposed indeed to common prejudice, but in strict accordance with common sense and medical science; and that it only becomes quackery, just as the practice of medicine becomes quackery, viz., in the hands of the ignorant, who push it to an absurd extent, and claim for it a miraculous amount of efficacy to which nothing human can be justly entitled. Nor do I believe it *possible* for medical men to doubt its *efficacy*, although they may differ as to its amount or degree. Nor do I believe that the great body of medical men are really opposed to its *use*, but only to its *abuse*. On the contrary, I believe that they need only to see it divested of all its German mysticism, and to feel assured that it will be practised in a rational and professional manner, to induce them to recognize and recommend it in all that multitude of chronic ailments, for which they are now accustomed to send the sufferers to all sorts of English and foreign watering places, where the most that can be expected is a little alleviation. I am as certain as I can be of anything, that a great number of these might be permanently cured by a few months' submission to a rational hydropathic treatment."

Of THOMAS J. GRAHAM, M.D., &c., Member of the Royal College of Surgeons, London.

"The system of treating diseases by cold water is now attracting considerable attention in this kingdom, and regarding it as a valuable auxiliary to medical practice, I have pleasure in describing its principal baths and manipulations, hoping that some of my afflicted readers may gather from this account of it, such hints as will be very serviceable in *augmenting their strength, and relieving their disorders*.

"I have devoted much time to the study of hydropathy, and have seen a great many cases treated by this new method, besides those treated at Epsom under my sole care.

"The principal remedial means employed in the "water cure," are the sudorific process, the cold bath, the shallow bath, the wet sheet, the sitz bath, the wet bandage, the douche, and the foot bath.

"*Sweating*, which is a very important part of the treatment, to be beneficial, must be adapted in its duration to the nature of the disease, and the constitution of the individual.

"The cold bath is generally taken after sweating, by those patients who have sufficient vigour for reaction; strange as it may appear to many, I consider the determination towards the skin induced by the perspiring, to be a great advantage prior to the use of the cold bath, because the internal organs are thereby relieved, and the shock has quite a different effect on them, from what it would have if they were not first thus soothed and invigorated.

"The shallow bath is a bath of great service in numerous cases. With cold water it is very serviceable in general debility; and with tepid water in local inflammations and fever. In my opinion, this kind of bath is not so frequently employed in the German mode of practice as it ought to be.

It is a most valuable remedy, and there are few cases of debility in which it is not indicated; and in which it will fail to prove invigorating, and either to *relieve or cure chronic inflammatory action.*

"The sitz bath is unquestionably a remedy of great power in all disorders of the *abdomen and head.* It draws the bad humours from the head, strengthens the whole of the digestive organs, and improves their secretions; only a small quantity of water is used, with the view of securing a reaction, as thus the water soon becomes warm.

"It is *strange* that medical men have so much neglected this simple and yet powerful remedy, especially in diseases of the abdomen; the tepid or cold water being by these means brought into immediate contact with the parts affected, and kept applied to them for any period we please; the effects can be regulated at pleasure, and are very satisfactory and striking. In weak bowels, congestion of the liver, dysmenorrhea, chlorosis and other female complaints, it is of the first importance. I have found it invaluable in many female complaints, and in diseases of the eyes.

"The action of the sitz bath is derivative, if employed for a short time without changing the water; that is, it draws the blood from the upper regions of the body by the consecutive reaction of the system, which accelerates the circulation in the smaller vessels of the parts immersed. Thus heat in the head is lessened, congestions there are removed, and the pulse is softened and moderated.

The foot bath—this bath is likewise employed as a derivative from the superior parts of the body, and I have found it of striking benefit in affections of the head. Its powerful effects in deriving from the head, and in warming cold feet, will be credited by few, until they have either felt them in their own persons or witnessed them in others. In the whole of the hydropathic practice, there is no means more strikingly powerful than the foot bath in certain instances; I can commend it with confidence in determination of blood to the head, in head ache, in affections of the eyes, and in habitual coldness of the feet.

The douche is a fall of water from a considerable height, usually from 15 to 18 feet, of about the thickness of a man's wrist. All patients who have tried it soon become quite delighted with the sensations it produces, which are very invigorating and delightful.

It is prescribed with a view to invigorate weak parts, to strengthen the whole muscular structure, and when a crisis is thought necessary, to stir up all the humours and bring the bad ones to the surface.

The wet sheet—this is one of the principal means employed in the hydiatic treatment. It is very useful in softening the skin and improving its secretions.

The umschlags or wet bandages—the wet bandages are very useful applications in most local complaints and in constipation. The immediate effect of a wet bandage is to reduce inflammation, allay irritation, and impart tone to the nerves and vessels of the part to which it is applied.

In all sympathetic disorders of the heart, the proper use of cold water is one of the best and most efficacious means of cure which can be resorted to; and therefore I would earnestly exhort all such sufferers to take *little physic*, and use *abundance of cold water.*

PHILOSOPHY OF THE WATER CURE.

According to the sublime discoveries of Liebig, Animal Life, in its ultimate analysis, consists of a continual transformation of matter. A ceaseless operation of two opposing forces—Restoration and Decay. By this primary law of life, the tissues of the body are continually renewed—food is changed into blood, and blood becomes solid tissue, which, having served its purpose in the economy, becomes in turn effete, and is removed in the shape of excretions. The blood receives its dark colour from the worn-out materials, and the emunctories of the skin, liver, kidneys and lungs, serve as drains by which they are conveyed out of the system.

In a state of health, the blood contains in itself all the elements of nutrition necessary for repairing the wastes of the living organism ; but under disease it is liable to become morbidly changed, from the inability of these emunctories to remove the decayed materials. In the lungs, the blood must receive its necessary supplies of oxygen to combine with its carbon, for the production of animal heat. By the process of respiration, this oxygen must be obtained from the atmosphere, and carbonic acid gas, the result of its combination with the carbon, be expelled. In the capillaries of the skin a similar process is carried on, while the liver and kidneys afford their powerful co-operation, in the object of removing dead and noxious materials from the system.

An equilibrium of the conservative and destructive powers of the body constitutes health ; and the want of this balance causes disease. Every transformation of a living body is also under the influence of a nervous and vital principle, capable of modifying these chemical combinations of the living structure. The nerves of organic life preside over chemical changes in all the circulating fluids ; and regulate the functional activity of all the viscera. When any of them are morbidly impressed by unnatural stimulations, the impression is reflected along the entire chain, and reaches every organ dependent on them for the regular performance of its functions, with a degree of intensity proportioned to the force and continuance of such impressions. The first link in the chain of diseased action is the impairment of the nerves of organic life, and the continuance of such condition necessarily leads to deranged functions and ultimate destruction of tissues. Hence, we observe, the digestive, assimilating and circulating systems, are immediately disturbed in proportion to the intensity of the injury, and the importance of the organ in which it is situated.

All morbid conditions of the body are reducible to a few primary types. Many of the forms of diseased organism are precisely suited to the varied applications of water, at different temperatures, which gives a certainty and simplicity to its remedial effects, no where else to be found. Its action is entirely physiological ; it removes obstructions, reduces morbid temperament, and gives a healthy play to all the functions. It causes a

return of suppressed secretions and excretions; sets up a drain of peccant matter from the air tubes, bowels, skin and kidneys, and establishes eruptions and boils on the surface of the body. It thus calls into activity the self-protective and recuperative powers of the economy, and aids in throwing off the accumulated materials of mischief.

The Water Cure attacks diseased localities through the system; and by improving the latter, the former are removed. Unlike the drug treatment, therefore, it never sows the seeds of future maladies. In the hands of experienced men, it is capable of exalting the mental and physical energies of the whole system, and of being suited to the age, temperament, and constitution of the patient, as well as to the disease. The only guide that is necessary in its application, is a strict interrogation of all the functions, and a knowledge of their previous history. The only condition of treatment is the withdrawing of the organism from all unnatural and excessive stimulations, as regards alcoholic drinks, dietetic excitements, the passions of the mind, business occupations of life, study, &c. &c. In all these, perfect repose is required.

The art of healing consists in depressing excessive action, in stimulating deficient action, or in both, conjointly or alternately. All therapeutic agents, however great their number, are reducible in their ultimate action to stimulants and sedatives. The former increase temporarily or permanently the nervous energy; the latter diminish capillary tension, equalize the general circulation, and diminish the excitement of the heart and arteries.

It is a truth capable of the clearest demonstration, that water, in its varied applications, can accomplish this double object of stimulation and sedation, better than any twenty articles of the *pharmacopœia* conjointly. Water is used externally at a variety of temperatures, each producing somewhat different effects; thus we have the *cold bath* below 65° of Fahrenheit,—the *tepid bath* between 65° and 85°,—the *warm bath*, between 85° and 96°, and the *hot bath* from 96° to the limit of endurance. All of these baths are of importance in the treatment of disease; but the limits of my pamphlet are such as to prevent my dwelling upon each at length. I shall therefore confine my remarks to those of most importance—the warm and cold baths.

In observing the effects of cold water applied externally, we distinguish the following results:

First: A shock—or the immediate impression made on the nerves of sensation, and through them upon the whole system, by the sudden application of cold to any exposed part. A familiar, and very striking illustration, will at once present itself to the mind of every reader, in the hasty recourse which is generally had to *water* in cases of *fainting*. The powerful impression given in this way to the sensory nerves, causes a sudden and violent contraction of the surface of the body, and a recession of the fluids to internal organs, producing congestion or engorgement. This congestion may be only temporary, and immediately pass off without doing injury; or it may, owing to ignorant or inexperienced administration, terminate in serious and lasting mischief. Hence, we see the absolute

necessity for a careful investigation of the condition of every system labouring under disease, before resorting to so powerful an agent for its removal; and the danger of the indiscriminate use of so potent a remedy. Water is seldom used for the shock only, except in diseases of a purely nervous character.

Second. Refrigeration, or a lowering of the temperature of the body, by carrying off the animal heat. This effect is produced by the direct attraction existing between heat and cold, and the tendency of hot bodies when brought into contact with cold ones, to establish an equilibrium of temperature, in strict obedience to the ever enforced laws of nature. Upon this principle, the body of a patient labouring under idiopathic fever, when immersed in a cold bath gives out its heat to the water, in the same manner that a bar of heated iron cools, by sharing its caloric with the cold fluid when cast into the furnace trough. Their state is equalized—the hot body becomes cooler—the cold one hotter.

Third. Reaction,—which is above all others in importance, inasmuch as it counteracts and overbalances all the injurious tendencies of the cold bath. It is of great importance to the physician, when the system has received the irresistible, and almost too violent stimulation of the shock; for at such times *nature* herself becomes the willing and active co-operator with him for the relief of his patient from suffering. The sluggish life streams of the sick man, quickened by the dash of cold water upon his morbid and irritable frame, rush to a dangerous gathering around the vital reservoir; and there threaten evil; but the *reactive power* interposes ere the evil reaches its height; and the heart, stimulated to increased energy and action, throws off its burthen. The blood now no longer lazily flows through the veins, but circulates with all the impetus it has received, washing in its course the accumulated impurities from the banks of its canals, and more frequently depositing the sediment of nutrition along its course. By reaction all internal congestions are overcome—a profuse perspiration carries off the lighter wastes of the body; and an increased action of the kidneys and bowels, purifies it from the grosser matters. The muscles are hardened and invigorated,—the spirits are rendered buoyant and vivacious, and the whole economy of life, mental and physical, seems aroused and regenerated by its wonderful agency.

Having thus hastily glanced at the principal effects of the external use of cold water, which we have found to produce three important curative effects—1st. A *Shock*,—of the most essential service in the treatment of nervous diseases—2nd. *Refrigeration*,—our only rational hope in the treatment of fever—and, 3rd. *Reaction*,—for the purification of the system, by eliminating waste matters, and stimulating all the organs of life to increased action; we will turn for a short time to the consideration of Warm Water.

Warm water or that of a temperature between 85° and 96° of Fahrenheit, when applied to the body, acts as a general fomentation. But in no part of the hydropathic treatment do its operations require more prudence, more profound knowledge, skill in diagnosis, and an

accurate and trustworthy acquaintance with all the resources of the constitution, than in the use of the warm bath ;—for, if the temperature of the water be raised too high, or its use continued too long for the strength of the patient, or the nature of his disease, the skin becomes red and swollen, or congested—the arteries throb with violence—the face is bloated—the eyes suffused with blood, and not unfrequently cerebral congestion, or a fit of apoplexy, closes the scene. This result, however, can only follow the abuse of the treatment by ignorant and presumptuous pretenders. When judiciously used, this bath is one of the most delightful in its effects, and independent of its medicinal properties, has been long known among the pleasures of the luxurious.

Under its operation, the skin, when dry, hardened and corrugated, gently relaxes—exhalation and absorption take place—the irritability of the nervous system is soothed into a delightful sense of comfort—internal congestions are relieved by the mild celerity which is thrown into the blood circulation, equalizing its distribution throughout—fatigue of body and mind is forgotten—a delightful sedative influence steals over the system—and not unfrequently a placid slumber, “wearied nature’s blest restorer,” soothes into forgetfulness all the earthly cares of the spell-bound subject of the warm bath.

It may be thought by many who cannot judge from experience, that the writer has been too extravagant in ascribing such pleasant effects to water, even when used for its curative powers ; but at this he will be not at all astonished, because the prejudice and habits of our whole lives have impressed us with the belief, that medicines must be disagreeable in order to effect their purpose ; and that nothing can have a remedial effect which does not bear with it an association of necessary unpleasantness.

This is an error which the public will find both pleasure and profit in removing. All the pleasant effects already described are realized, and more than realized, by patients in the use of this simple and natural, but most energetic cure.

Wilson speaks justly, when he says that “Water Cure Establishments bear no resemblance to the abode of sickness. Purity of atmosphere and gaiety of spirits reign around ; and instead of the common hospital consciousness of *death’s presence* in many forms ;—the influence of recovery governs everything.”

This question is often asked—“What strength can there be in water ?” My answer is, that we have no twenty remedial agents in the *materia medica*, whose separate or combined powers will accomplish as much good as *pure cold water alone* (though we have doubtless many that will accomplish more evil)—and that when cold is united with warm water, good diet, air and exercise, there are few curable diseases that cannot be treated successfully without the use of a grain of medicine. Though I speak plainly on this point, however, I must not be understood to condemn the use of drugs altogether. I often derive the greatest benefits from combining both medicines and baths ; yet make a practice of using the former as little as possible, seeing no reason why that stomach given for the digestion of our food, should be converted into a chemist’s

alembic for the concoction, solution and digestion, of elements better calculated to destroy, than to build up or restore to a healthy tone and action, the complicated mechanism of the animal economy.

Water, is necessary for the support of life. It is undoubtedly the natural drink of the whole human family. Who can either doubt this fact, or its importance, when informed, that no less than nine-tenths of our bodies are pure water; 77 out of every 100 parts of muscle or flesh consist of water, and a much larger proportion of the blood and nervous matter; nor is there an organ or tissue in the human system that is not dependent on it for its tone, flexibility and elasticity. Even life will be sustained for a longer period of time on pure water alone, than on any dry article of food in use. These statements appear incredible at first; but they are easily demonstrated. The first sensation felt in threatened starvation is that of thirst, in the intensity of which, all others are forgotten; and as well might you give a man a piece of clay, and expect him to derive nutriment from it, as to give him the most nutritious articles of food, if the stomach could not pour forth a liquid secretion capable of dissolving it; which must be the result of cutting off the supply of water.

But if water is necessary for the support of life, it is also necessary as a purifier of the system. No motion, not even the raising of my hand, or the utterance of a single syllable, can take place without the destruction of a portion of organized structure, and a demand upon the system for a fresh supply of nutriment. That a process of disintegration or decomposition is constantly going on, may be known by the frequent recurrence of hunger, and by the fact that labour increases, while indolence diminishes the appetite. What then is to become of these waste or decomposed matters? If allowed to remain in the system, disease will follow. Nature ordained that they should be removed by the outlets of the body; and that water should be the principal agent in effecting their removal. A large quantity of impurity is constantly being thrown off by the lungs,—a fact, the truth of which we are made sensible in the winter season, by its condensation in the form of frost on any articles of clothing near the mouth. A second portion is removed by the skin, in the form of either sensible or insensible perspiration. Perspiration fulfils two very important offices in the renovation of the human body. First. That of removing a large amount of impurity, or disorganized matter. Second. That of keeping the temperature at its proper standard; and which it does by carrying off the superfluous heat. We see beautiful illustrations of this wise provision of nature in the summer season. The heat of the body is raised above the healthy standard, and if not relieved, fever would follow. Here nature comes to our assistance—a sensation of thirst is excited. The system requires water, which is no sooner taken, than, on the least exertion, profuse perspiration breaks out, and the danger is removed.

Lastly, the kidneys and bowels serve the same purpose in the economy, as the lungs and skin,—that of cleansing from impurities—the only difference being in the grosser nature of the matters eliminated.

From what has already been said it must, I think, appear evident, that no agent is so important to man in a state of health as water, or so likely to prove beneficial in disease. It comprises nine-tenths of our substance—gives tone to our organs, and elasticity to our muscles; and is the agent above all others in importance in the solution and digestion of our food. It cleanses from impurities—opens the pores of the skin, and steals forth in the form of perspiration—promotes excretion, and finally preserves health by establishing and keeping up a harmonious equilibrium throughout.

As a beverage, water when taken into the mouth, stimulates and strengthens the muscles and glands, increases the flow of saliva, and imparts a crimson glow of health to the cheeks. In passing to the stomach it soothes and cleanses the œsophagus in its course; promotes digestion by exciting to action the muscular walls of the stomach; aids in the solution of the food; is absorbed to repair the loss of the aqueous parts of the blood carried off by the process above mentioned; and, lastly, undergoes digestion, yielding its elements to the building of the substance of the system—all of which are wants of nature, which we cannot refuse to supply, without doing so at the sacrifice of health—the choicest blessing she can bestow.

It is impossible ever to arrive at more than an approximation to certainty, as regards the quantity of water required by man for any given period of time in a state of health. The requirements of the human system vary as much as do individuals themselves; depending, in a great measure, on constitutional peculiarities, the quality of their food, and nature of their habits. Persons living on animal matters require more water than those who subsist mainly upon vegetables; because of the larger quantity of fluid contained in the latter. Thirst is the natural indication for drink; but even in health it is not sufficient that we drink only when *thirsty*; for, on rising in the morning, a tumbler of cold water, followed by a little exercise, will be found to freshen the whole existence—improve the appetite—remove all mawkish taste from the mouth, and cause a free expectoration of any mucous or phlegm that may have accumulated in the fauces and air passages during the night. Let any person wishing to judge for himself, rise with the sun, drink a glass of cold spring or well water, and follow by a brisk walk of at least two miles; and he will return invigorated and refreshed in mind and body, with an animated countenance, a good appetite, and a stomach capable of digesting almost anything.

During each meal an ordinary sized tumbler of water is not only beneficial, but necessary;—more is injurious, if not by directly diluting the gastric juice, (which is a disputed point), by requiring absorption before the process of digestion can commence, and in this way interfering with the operations of the stomach.

On retiring to rest, refreshing sleep is promoted, and the stomach, exhausted by the labours of the day, aided in the solution and digestion of the last remnant of food, by a glass of cold water taken in small quantities. At other times the sensations are the best guides.

No artificial beverage will supply the place of water in the animal economy. It is not sufficient that we use warm, debilitating tea, which apart from being unnatural, is positively injurious. The volatile oil, on which its flavour depends, is powerfully narcotic; so much so, that a decoction of one ounce of common green tea will destroy life in a dog or a cat as suddenly as an equal amount of arsenic or opium; and its astringent principle, or tannin, must tend to produce that *habitual constipation* so common in hard tea-drinkers. So convinced am I of this fact (and my conclusion is drawn from personal observation and experience), that I have no hesitation in giving it as my opinion, that in a great majority of instances, nervous diseases, liver complaints, dyspepsia and constipation can be traced to the astringent and narcotic properties of *Tea*—a substance in such common and irrational use among all classes of society. But tannin not only produces constipation, but, according to Schwann, renders the gastric juice inert, by throwing down a precipitate. And when we add to this the evidence of the Chairman of the East India Association given before the British Parliament, that "there is not a pound of tea which comes to this country (England) from China that has not undergone a coloring process; and that tea which we call 'green' here, is *colored green*, and might as well be colored yellow or blue, if required, to adapt it to the market:" we have surely reasons enough for denouncing it as injurious. The same is true, to some extent, of coffee; as well might we resort to any other simple medicinal drug as to either. The tobacco leaf is quite as sweet to the taste of its votary, or the extract of poppy to the opium eating Turk; and saffrafas, columbo or dandelion much more rational, if we may judge from their effects upon the system. All *may* prove beneficial in disease, but none in health. "Man is the only animal accustomed to swallow unnatural drinks, or to abuse those which are natural. And this is a fruitful source of a great variety of his bodily and mental evils."

It is the peculiar province of the physician to witness frequently the victimizing results of this universal, though unexposed intemperance. The saffron colored hue of the skin—the dull, heavy languor of the eye—absence of expression in the countenance—want of physical energy—nervous tremors—head aches—dyspepsia—loss of appetite—colics—constipation and liver complaints, with all their attendant evils, betokening a partial or complete annihilation of the finer feelings of our nature, and, in but too many instances, a degradation of humanity almost to the level of the brute of the field.

And alcoholic liquors, though acknowledged by all reflecting minds to be injurious in their immediate and ultimate effects, are still fashionable in the social circle, for no other reason than that they are encouraged by the profession; and still linger in the chamber of sickness, as the companion and pretended friend of the afflicted, under the grave advice and direction of the medical adviser.

"Unhappy man, whom sorrows, thus, and rage,
Two different ills, alternately engage.
Who drinks, alas! but to forget—nor sees

*That melancholy, sloth, severe disease,
Memory confused, and interrupted thought,
Death's harbingers, lie latent in the draught !
And in the flowers that wreath the sparkling bowl,
Fell adders hiss, and poisonous serpents roil."*

We have no excuse for this abuse of the harmonious laws of nature—this yielding of heaven born reason to the cravings of a depraved appetite. God has placed within our reach a fluid capable of allaying our thirst ; supplied from his own distillery, in sufficient abundance for all our wants ; and a million times more agreeable in its ultimate effects than any substitute ever concocted by man, in his natural proneness to adulterate Heaven's best blessings for the purpose of not merely satisfying, but of creating other tastes than those given him by an infinitely wiser nature at his birth. Use, then, pure water ; it will impart increased vigor to the young, and awaken the spirits of the old.

*" Though I look old, yet I am strong and lusty,
For, in my youth I never did apply
Hot and rebellious liquors in my blood ;
Nor did with unbashful forehead woo
The means of weakness and debility.
Therefore, my age is lusty as winter,
Frosty—but kindly."*

In the natural condition of man—that of perfect health—cold water may be used universally as a cooling and refreshing agent, and as a cleanser from impurities. It will brighten the intellect—improve the complexion—invigorate the constitution, and act as an effectual preventive of many, and in fact the majority of diseases. In the abnormal or diseased condition, it possesses the power of fulfilling the most opposite indications. And when skillfully employed, the vital principle seems under the control of the physician to be elevated or depressed at his pleasure. There are, indeed, a few maladies in which it acts injuriously ; and in those few it will prove, if not used with a discriminating hand, as powerful for evil as it generally does for good. Still, in this respect it does not differ from the most simple article of food : either, will do injury if used improperly in *manner, time or quantity*.

We cannot argue—because Water acts as a frequent cause of disease, when we are exposed to it without sufficient protection—that it is a dangerous remedy when properly applied. I will give an example in illustration. A. was exposed to a shower of rain, and contracted a severe catarrh, or cold, followed by inflammation of one or more of the organs of the body. B. took a cold shower bath, and sustained no injury whatever. What is the difference between the two cases. Both were exposed to water at the same temperature ; and why should not one have suffered from such exposure as much as the other ? *The reason is obvious : a difference in the manner of its application.* When two bodies differing in temperature, the one cold, the other hot, are brought into contact, the hot body gives off its heat to the cold one until both are brought to the same temperature, (as stated while speaking of the effects of the cold

bath). Now, in the first instance, the clothing became saturated with the cold fluid, which had the effect of extracting heat from the body; and the cold being continued for a much longer period, would necessarily remove a larger quantity of heat in the first than in the last instance. But there is still another reason—the wet clothes did not retain the heat which they received from the body, but allowed it to escape by evaporation into the air, and fresh cold being constantly applied, continued to extract more heat, until at length the temperature was reduced, below a point compatible with a healthy action of the superficial parts of the body. The blood could not circulate freely on the surface; but was thrown upon internal and more vital organs, producing long continued congestion without sufficient reaction; and hence disease.

Disease then, in the first case, was caused by such a reduction of temperature, by the evaporation of heat from the application of cold, as prevented the circulation of blood upon the surface of the body; by long continued congestion of the internal organs, and by want of a proper reaction; while disease was prevented, in the second case, by not reducing the temperature of the surface of the body below a point compatible with free circulation; by the short period of the internal congestion, and by the perfect reaction which followed. Here then, we have a clear line of demarcation between the two cases, which must, I think, appear evident to the minds of the most sceptical. If this explanation be true, it appears that injury sustained by water applied to the surface of the body does not arise from the mere circumstance of its application, but from the manner of its use and length of its continuance.

As a hygienic agent, or preventive of disease, cold water is of the utmost importance. We possess no agent so generally applicable to the varied wants of man, or that supplies these wants with so much benefit and so little injury. Of its importance in the prevention of disease, so fully am I impressed, that I have no hesitation in stating my conviction (arrived at after mature deliberation), that water, properly used as a beverage, and a remedy, with well regulated diet and sufficient exercise, would eradicate nineteen twentieths of the ills to which the human race are liable.

This is an interesting and all important subject; one which demands, and should receive, the calm consideration of every scientific physician and well-wisher of his fellow man. Though it may seem at first glance to be nothing more than a chimera of the brain—words without sense or meaning—yet a closer investigation will prove it to be founded upon a rock, as immutable as the laws of the material world—a truth big with the importance of no less a subject than the lives, health and happiness of hundreds of millions.

But why should it seem either fanciful or absurd? Are not ninety-nine hundredths of the ills to which we are subject, ascribable to direct violations of nature's laws, which violation might be avoided with an increase of all the real pleasures and enjoyments of life? The truth is incontrovertible! How many of the poor destitute emigrants who

arrived on our shores during the last season, lost their lives by the filth, confinement, impure air, and want of proper nourishment, which they endured in crossing the Atlantic? And how many of our most valuable citizens fell a sacrifice to the poisonous effluvia thus generated? Alas! too many widows and orphans, tell the tale of woe. What is true of Typhus fever, is also true of other contagious diseases. Filth and improper diet promote, while cleanliness and good diet prevent, their spread.

While we keep to the simple, natural and only rational state, obey rigidly the laws implanted in our nature—build no temples to Bacchus, nor celebrate his orgies; while in the selection of our food and drink, and the clothing with which we protect our bodies, alike from the burning rays of the summer sun, and the inclement blasts of winter, we consult our *necessities* rather than our pleasures and gratification; while in all the duties of life we conform to the dictates of reason, and the still, small voice within, we have little to fear from disease. It is by the neglect or violation of these, that diseases are generated—the strong arm unnerved—reason dethroned, and the constitution prematurely destroyed. On every side of us we daily witness the ravages of our *self-created* common enemy—disease; yet we still continue the infatuated votaries of the insatiate ravager.

“ In the fresh glow of beauty, the first flush of light,
Should the day-dawn be swathed in the shadows of night,
And the star of the morning pass fruitless away,
And break, to the fair earth, its promise of day?
Ah, no!—Then why fade thus the loveliest of flowers,
Or why, do the young, and the beautiful—die?
'Ere they drink of the rapture of summer's sweet hours,
'Ere the brow hath a cloud, or the bosom a sigh.”

When we reflect on the artificial lives we lead, what can we expect than that disease and premature death will come upon us. While we continue to use impure or improper articles of food and drink, can we expect strong, healthy and vigorous systems? Can bad food make good chyle? Bad chyle good blood? Or bad blood good nutriment? No! If the fountain be impure the streams cannot be otherwise; or if the fountain and streams be pure, and the waste-gates, through which all the waste matters are expelled, such as the skin, bowels, kidneys and lungs, are *closed*, disease must inevitably follow.

Whence spring the long list of diseases dependent on an impairment of the functions of the stomach and bowels? such as indigestion, dyspepsia, heartburn, colics, constipation, liver diseases, &c. &c.—of the vascular system, as inflammation of the heart, lungs, &c.—of the nervous system, as epilepsy, hysteria, hypochondriasis, tetanus, chorea, neuralgia, delirium tremens, insanity, &c.—of the joints, as gout, rheumatism, white swelling, &c.—but from improper food and drink, exposure to inclemency of weather without sufficient protection, and neglect of the natural discharges from the body. Laying aside accidents, and such casualties as war, I am convinced that by far the greater part of those who die in infancy, or

youth, might, by the means of prevention within the reach of all, be saved to the enjoyment of old age. In fact, the only necessary deaths (professionally speaking) I recognize, are those resulting from worn out constitutions; a slow but gradual attenuation and decay of all the powers of life.

In proof of the hygienic efficacy of cold water, we will proceed to lay before the public a few facts.

"I am at present," says a celebrated German teacher, "fosterfather of nearly seventy young people who were born in all the varieties of climate from Lisbon to Moscow, and whose early education was necessarily very different. These young men are all healthy; not a single eruption visible on their faces; and three years often pass during which not a single one of them is confined to bed: *and in the twenty years that I have been engaged in this Institution not one pupil has died.* Yet I am no physician. During the first ten years of my residence here, no physician entered my house, and not until the number of my pupils was very much increased, and I grew anxious not to overlook any thing in regard to them, did I begin to seek at all for medical advice. It is the mode of treating young men here which is the cause of their superior health; and this is the reason why death has not yet entered our doors. Should we ever deviate from our present principles—should we approach nearer to the mode of living in wealthy families, we should soon be obliged to establish in our institution, as they do in others, medicine chests, nurseries, &c." The mode of treatment alluded to consists in *Cold Bathing* every morning, followed by friction and exercise; the diet also is of the most suitable quality; meat is allowed at dinner only, the food consisting principally of bread, vegetables, fruit and milk.

In the New York Orphans' Asylum, there are at present upwards of one hundred and fifty children, among whom the average number of deaths is not more than two and a half per cent. annually; and it is believed by the managers, that if bathing daily, instead of weekly, were introduced, this average would be lessened so as not to exceed one per cent.

I might extend the consideration of this subject to almost any length, but circumstances will not at present permit. Having glanced at the Hygienic agency of water, we will next consider its curative powers, and briefly point out a few of the more prominent diseases in which it has been found beneficial.

On first entering upon the important duties of the medical profession, the young physician feels confident of success. He looks over the formidable list of remedial agents in his possession, and vainly supposes he can conquer every disease in the catalogue of human misery. I may venture to say, few physicians have entered upon the practice of their profession without experiencing more or less of this delusion; for alas! it is but a delusion. A few months of experience, and the truth of the following remark of Dr. Paris, will be admitted by all. "The physician, in casting his eyes over so extensive and motley an assemblage of substances, will be forcibly impressed with the palpable absurdity of some, the disgusting and loathsome nature of others, the total inactivity

of many, and the uncertain and precarious reputation of all;" and as life wears away, he will be inclined to exclaim, with Dr. Radcliffe, "In my youth I had twenty remedies for every disease, but now (in my old age) I can find twenty diseases without a remedy."

Gladly then, should we hail every addition to our present means, and rejoice if but one invalid is restored thereby. But the claims of water on our consideration are not circumscribed within such narrow limits. Thousands can already attest its curative virtues, and more are daily being added to the number.

Water is our main dependence in the treatment of all fevers—typhus, continued, remittent; bilious and intermittent. The temperature requires to be varied to suit the indications of each individual case. If the heat of the surface is above the natural standard, and the skin dry and harsh to the touch, cold water may not only be employed without injury, but with marked and astonishing benefits; externally, by baths, irrigations, spongings, &c., and internally as drink. If symptoms of prostration and want of action exist, the warm or tepid baths will be found preferable, if followed by cold showering or sponging, and friction with the flesh brush and coarse towels.

So successful have I found this treatment, that out of forty-four cases of low typhus fever, treated in the country during the past summer, not one death occurred.

I extract the following cases from my minute-book:—

"*July 15th.*—Was called to visit a family of destitute emigrants. On arriving at their hovel, a poor half-famished remnant of mortality met me at the door and directed me to the chamber of sickness. Stooping over the bed, he removed the coverlet, and exposed a face bearing a strong impress of approaching dissolution. 'This,' said he, 'is my brother; he has been fourteen days sick, and we have been expecting him to breathe his last since yesterday.' I examined his pulse—the stream of life flowed quickly though feebly on—his tongue was of a dark brown colour; his breath foetid—his teeth, gums and lips coated with black offensive sordes; and petechiæ and sudamina existed in great abundance over his breast and neck. I spoke to him; but in the struggle with the fierce destroyer, reason had been dethroned, and with it speech had fled. The case seemed utterly hopeless. I stood over him, reflecting on the course to pursue, and the probable length of time he would hold out, for I had not the least idea he would recover—when the anxious inquiry, 'Have you any hope?' aroused me from my reverie. I shook my head. 'I knew it,' said he, 'I knew it; but can you do anything for these?' I turned, and now for the first time beheld, on a miserable pallet of straw in a corner of the room, a younger brother and sister, both labouring under fever. On enquiry, I found they had been six days ill. I examined them, and finding their cases of a milder nature, determined to combine the two forms of treatment—stimulating and cooling. I ordered the face, neck and hands to be washed frequently in cold water, and cold drink to be given as often as wished for, with a wine-glass of brandy during every twelve hours. The first patient, whom I did not

expect would more than survive over the following day, I had plunged for one minute into a cold bath. A rain trough, under the eaves of the house, was his bath tub. At the expiration of the minute, he was taken out, dried and placed in bed. I then left, to visit another family, promising to return in an hour. On calling again, I found, to my great surprise, that *the patient had gone to sleep* soon after he was removed to bed, and had not yet awakened. After giving directions to repeat the bath in the afternoon, if he seemed better—or no worse, I again left, promising to call early in the morning.

"16th.—The patient seems much better—the afternoon bath was given as directed. His pulse is stronger, and less frequent. Ordered his face, hands and mouth to be well cleansed with cold water frequently, and the bath to be repeated three times during the day, if no symptoms of prostration come on.

"17th.—Marked improvement—speech partially returned—less heat of body—pulse stronger—delirium almost entirely gone—tongue and mouth cleaner and less offensive.

"18th.—Still improving—perfectly conscious, and was able to thank me for what I had done for him.

"19th. Pronounced him convalescent: yet he has been raised from Death's door without one grain of medicine, or drop of wine or brandy!"

On the morning of the 18th, finding that no improvement had taken place in the other two patients, notwithstanding that they had taken brandy freely, I ordered the brandy to be discontinued, and the cold baths resorted to. From this moment they began to recover; and on the 24th (the ninth day of my attendance), all were so far restored as to require only good nursing.

These were the *first* cases of fever in which I adopted the cooling plan under my own direction, and on my own responsibility; though I had seen the happiest effects from it in the hands of a New York physician. I felt many scruples in adopting principles so much at variance with the precepts of my "alma mater," and was not over anxious to brook the prejudices of the public, should my patients die; but the hopeless condition of the first-mentioned case, induced me to wave all personal considerations. I resolved to try the experiment; and that experiment restored the diseased and emaciated frame of the sick man to its wonted health and vigour, gave back to a helpless female her partner, and turned the house of sorrow into a house of joy.

"July 20th, 1847.—Visited a family of thirteen persons, *eleven* of whom I found sick with the emigrant fever. They are emigrants, and arrived from Toronto ten days ago. In consequence of the fever, they have been obliged to seek shelter in an old barn, where I found them stretched upon straw mattresses, laid upon the rude floor, with scarcely anything to cover them. Miserable as is their condition, still it is far better than that of the cases just narrated. They have a large roomy building; and a free circulation of air prevents re-contamination, by carrying off the poisonous effluvia as fast as it is generated." The treatment resorted to was as follows:—tubs of cold water were placed upon

the floor every morning, in which the patients were obliged to wash their bodies, or be washed by their attendants, at least three or four times a day; and cold water, as drink, was given freely. Under this treatment, at the end of a week, nine out of the eleven had recovered; and on the second of August, thirteen days from the first visit, the last patient left the barn convalescent. Yet during the whole period, I neither gave calomel, Dover's powder, nitre solution, soda powders, brandy toddy nor wine: all recovered under the use of the simple agent—water!

The other cases of fever, treated by me in the country on the cooling plan, have nothing of peculiar interest: suffice it to say, that all recovered without the use of a grain of medicine. I appeal to the opinions of the public for a decision, whether the above facts are not sufficient to ground my belief in the practice on an immutable basis?

In Toronto, the same success has attended it; and many there are, who at this moment can rejoice in health and vigour, who in my opinion would have sunk, in defiance of any and all the combined agents of the *Materia Medica*. So strong is my confidence in this remedy, that I expose myself to contagion with the positive certainty, that should I contract the fever, I have within my reach almost a specific for it. How different are my feelings now, to what they were prior to my knowledge of its efficacy! I then dreaded every exposure; feeling, like many of my medical brethren, little confidence in the remedies I was prescribing, and a dread of the consequences of an attack.

In chronic diseases, cold water is a most powerful auxiliary to other means; and in asthma, acts like a charm. Of the latter disease, I have seen many cases of *ten and fifteen years'* standing cured by it in a few months; and I am not at this moment aware of its ever having failed to give marked relief. But great care is required in its administration: life might be sacrificed by imprudence in this respect. The disease must be discovered, and all the powers of life carefully investigated.

In the early stages of consumption, chronic cough, and bronchitis, I know of no medicinal agent that possibly can supply its place. These diseases are generally of a very intractable nature, and resist for a long period of time all treatment. But where no serious organic lesion has already taken place, the cases are few which will not be much improved, if not entirely cured by a proper use of water, diet and exercise. There is scarcely a disease of the lungs which does not arise from neglected colds. Mankind are but too apt to reason falsely in this respect: they think, because colds appear simple in their nature and soon pass off, that they are of little consequence; but let me warn all those who thus trifle with these fell destroyers of our species, that they are laying the foundations for serious, if not for fatal inflammations—for consumption, asthma, and a long train of diseases, which once induced, either destroy life or ruin the constitution. And how easily they can be prevented.

Every morning, on rising from your bed, take a shower bath, with water at the temperature of the season; or if this be not practicable, at least sponge your body with cold water, particularly the chest, neck and shoulders, and follow by friction with a coarse towel for a few minutes,

drinking a glass of cold water before exposing yourself to the open air. This done, you may go forth with perfect impunity; and, in the language of Sir Astley Cooper, you "will scarcely ever have a cold."

In the treatment of epilepsy, it has long been used with success in France and Germany, particularly in that form of the disease characterized by general plethora or fulness of the system, and great tendency of blood to the brain. In chorea, or St. Vitus' dance, hysteria, hypochondriasis and nervous debility, water is a powerful agent, effecting a removal of these diseases after long standing, and after almost every medicine known has been tried in vain. But here we often meet with cases in which cold water would prove very injurious, but which may be judiciously treated by *warm*.

In many diseases of the spine, accompanied by distortion and paralysis, cold water is useful; though it is generally necessary to commence with water at about 85°, gradually lowering the temperature to any degree required. In partial paralysis of the muscles, arms or face, or loss of vital energy in the nerves of special sense, such as of taste, smell, hearing, &c., the coldest water is required; while in opposite conditions, as those of increased sensibility and irritability, as neuralgia, sciatica and the like, the temperature requires to be varied to suit each case; some require it of a high temperature, while others cannot bear water above 40° to be applied to their bodies, and will even endure it ice cold with benefit and satisfaction.

In acute inflammations of the brain and investing membranes, and of the organs within the chest and abdomen, to the extent of my observation, the water practice is not only safe, but decidedly superior to the one generally adopted by medical men. Water possesses the singular property of fulfilling the most opposite indications. *Stimulating* or *depressing*, astringing or relaxing the living fibre, at the will of the physician; with it we can *purge*, vomit, and stimulate, produce diaphoresis, diuresis, depletion and derivation, and render it refrigerant, deobstruent, sedative and anodyne. Who can doubt the efficacy of a remedy, possessing such power and adaptation to the conditions of the system, in acute inflammations. If the pulse is too high, we can reduce it *without wasting the strength of the patient*, far more speedily, certainly and efficaciously, than can be done by blood-letting. If there be *internal* congestion, we can produce congestion of the *surface*, and thereby relieve the internal parts. If the bowels are confined, we can purge without the aid of noxious drugs. If the pores of the skin are closed, we can produce copious perspiration, without the aid of hot bottles or diaphoretic medicines. If the secretion from the kidneys is suppressed or diminished, we can increase it without giving diuretics. The water treatment acts by drawing from the affected organs; and by opening all the natural outlets of the system, allows nature to rid herself of effete matters, and re-establishes the equilibrium of health.

In rheumatism, the success of hydropathic treatment has been much greater than the most sanguine hopes of the writer, reasoning "a priori," led him to expect. Many persons who were confined to bed, or obliged

to hobble about on crutches, and who had suffered from this most distressing disease for years, have been perfectly restored; and others, who could not devote the time necessary for complete recovery, have been greatly benefitted without the aid of a grain of medicine. But in the treatment of this disease and its brother, gout, the greatest care is necessary. The applications require to be changed in every case; and scarcely two cases will be found in which the same treatment is applicable.

In dropsical diseases water is equally applicable, effecting a removal of the secreted fluid by overcoming obstructions, promoting absorption, and by invigorating the general health.

In chronic affections of the stomach and bowels, such as dyspepsia, chronic inflammation, constipation, colics and the like, the Water Treatment is invaluable. "Drugs may relieve symptoms; but they never yet have created, and they never can create, a healthy stomach, or confer a vigorous digestion." The water treatment attacks the disease through and on behalf of the constitution; and in all curable cases effects a perfect restoration of the healthy tone of the affected organs.

In skin diseases, the most difficult class of complaints we are called upon to treat, Water is little short of a specific; but a much longer period of time is required than is generally allotted for the cure of other diseases.

In eruptive fevers, such as small pox, scarlet fever and measles, it is highly recommended by European authorities. In measles, the writer has uses cold applications in about twenty cases with the happiest effects; and has had many cases of scarlet fever under treatment, all of which recovered much sooner than they would have done under medical treatment, and without an unfavorable symptom.

Sir Charles Scudamore mentions a female patient of Priessnitz, whom he saw dancing with the scarlet eruption upon her body. She was at that time under treatment, and recovered in a few days without any unpleasant result.

Here, then, we have a few of the diseases in which the Hydrotherapeutic, or water treatment, is pre-eminent as a means of cure. I might have mentioned many more on the authority of others, but in recommending it to the public, could not conscientiously advise the adoption of this peculiar practice in the treatment of diseases which I had not already submitted to the test of experience. Had space permitted, its recommendation to each form of disease would have been illustrated by cases; but the large amount of respectable authority adduced will, I trust, be deemed sufficient to satisfy the most sceptical. Should, however, any honest sceptic, in the simplicity of his prudence, desire more unquestionable evidence than mere assertion, or even the strongly corroborative testimony of the respectable European and American authority contained in this little work, he has only to make known his wishes, to be satisfied, by receiving the names and addresses of numerous patients, whom he will be at liberty to examine and cross-examine at pleasure. Were such investigation made to-morrow, and the results published to the world, I would venture to predict, that so far from militating against the Water-Cure

practice, they would more firmly establish it in the confidence of the public.

Yet another word to sceptics—medical or otherwise—and I have done. If you will not believe, from the assertions and arguments of the writer—from the published opinions of distinguished medical men—and from the positive statements of those who have cast themselves into the hygiean fount, bathed, and become whole, I will propose to you a more direct method of ascertaining the merits of this treatment. Have you a relative or friend who is afflicted with any serious disease—an affection of the liver—for which he has been blistered, cupped and purged almost out of existence; or has he asthma, with a formidable array of anti-spasmodics or anti-asthmatics always at hand to give temporary relief—dyspepsia, with an equal number of stomachic cordials, and dinner pills, to aid the digestion of his food, and allay irritation. Or has he that great bug-bear *Chronic Rheumatism*, for the cure of which he has tried a score of physicians, and exhausted all the anti-rheumatics in the plentiful provision of their drug resources; or the no less dreaded constitutional debility, for which he has expended a small fortune in tonic mixtures, sarsaparilla and ginger syrup, not to mention the glasses of good wine, and mugs of generous porter, kindly prescribed by his good-hearted physician, as it were, to mollify over the ever-attendant evils of his wearisome existence. Has he any of these diseases, and can find no cure in medicine; and is he despairing of recovery? If so, let him try the *water cure*; and my word for it, the result will scatter your fears and doubts to the winds of heaven. I do not tell you that all will be restored to health; but I can say with every confidence, that the majority *will be cured, all benefitted, and none injured by the trial.*

AMERICAN AUTHORITIES.

The Opinions of CHARLES A. LEE, A.M., M.D., *Professor of General Pathology and Materia Medica in the Buffalo University, and in Geneva Medical College, Editor of the New York Journal of Medicine and Collateral Sciences.*

It is with pleasure I can add the testimony of Professor Lee of New York, the talented editor of the New York Medical Journal and of many standard works in our market—among which the names of "Pereira on Food and Diet," "Paris Pharmacologia," and "Bacchus," may be mentioned. The latter will be found a valuable addition to every private library. But the learned professor evidently has no desire to see hydro-pathic institutions established in the country, and thinks the treatment may, and will be, employed more advantageously at home (i. e. in cities).

This opinion, however, he must have put forth without properly considering the subject. When we find the public taking as deep an interest in the preservation of health, as they now do in things of, comparatively speaking, no importance; when we find every family in possession of the necessary baths and bathing apparatus; then, and not till then, can we hope to introduce it extensively into private practice. But even the possession of these essentials, will not do away with the necessity for, nor the superior efficacy of pleasantly located establishments—as pure air, exercise and retirement from the bustle and anxiety of city life, are of the utmost importance in the treatment of many diseases.

Speaking of the "water cure" practice, he says—"Dr. Johnson is the proprietor of a hydropathic establishment at Stanstead-Bury, England, and the author of two or three medical works of some merit. He is evidently no ultraist, for he states his object to be to preserve all that is good of the drug treatment and unite it to all that is good of the water treatment—using both, abusing neither; such, we take it, is the aim of *every honest medical man*. We shall quote a few passages, from which may be gathered some of the views of the author, who, it should be stated, studied the 'water cure' under Preissnitz himself. * * * * *

The idea that water can only be properly used at a hydropathic establishment is absurd. It may and probably will be employed more advantageously at home. It would, doubtless, be a fine thing for the proprietors of these water institutions, if they could persuade the public to believe that no one understood the use of water but themselves; but we apprehend there is no great danger of such a result. We believe it to be the *duty* of the profession generally to study more closely the effects of the various applications of water as a remedial agent, with a view to its more general employment in the treatment of disease." Speaking of the Albany Orphan Asylum, Dr. Lee says, "The institution was established about the close of the year 1829. Shortly after its establishment it contained seventy children, and subsequently many more. For the first three years the diet of the inmates consisted of fine bread, rice, Indian puddings, potatoes and other vegetables, and fruit with milk; to which was added flesh or flesh soup once a day. Considerable attention was also paid to bathing and cleanliness, and to clothing, air and exercise. Bathing, however, was performed in a perfect manner only once in three weeks. Many were received in poor health, and not a few continued sickly.

"In the fall of 1833 the diet and regimen of the inmates were materially changed. Daily ablution of the whole body, in the use of the cold, shower or sponge bath, or, in cases of spinal disease, the tepid bath, was one of the first steps taken; then the fine bread was laid aside for that made of unbolted wheat meal, and soon after flesh and flesh soups were wholly banished; and thus they continued to advance, till in about three months more they had come fully upon the vegetable system, and had adopted reformed habits in regard to sleeping, air, clothing, exercise, &c. They continued on this course till August, 1836, when the results were as follows:—During the first three years in which the old system was

followed from four to six children were continually on the sick list, and sometimes more. A physician was needed once, twice or three times a week uniformly, and deaths were frequent. During this period (three years) there were between thirty and forty deaths. After the new system was fairly adopted, the nursery was soon entirely vacated, and the services of the nurse and physician no longer needed; and for more than two years no case of sickness or death took place. In the succeeding twelve months there were three deaths, but they were new inmates, were diseased when admitted, and two of them were idiots. The report of the managers says—'Under the system of dietetics the health of the children has not only been preserved, but those who came to the asylum weakly have become *healthy and strong*, and greatly increased in activity, cheerfulness and happiness.' The superintendents also state that, 'since the new regimen has been fully adopted there has been a remarkable increase of health, strength, activity, vivacity, cheerfulness and contentment among the children. The change of temper is very great. They have become less turbulent, irritable, peevish and discontented, and far more manageable, gentle, peaceable and kind to each other.' One of them further adds, 'there has been a great increase in their mental activity and power; the quickness and acumen of their perception, the vigour of their apprehension, and the power of their retention, daily astonish me.'

"In relation to the above experiment, we may remark, that the results appear to us to be owing more to the changes under the general regimen, air, cleanliness, bathing, exercise, &c., than to the substitution of vegetable for animal food. We have often known the same improvement take place among children in private families by the *daily use of the shower bath*, without making any alteration in their manner of living. The experiment, however, is a very valuable one, as it shows the great advantages that flow from a well regulated system of *air, exercise and bathing*."

How beautifully does the above experiment illustrate the great value of water as a preservative of health; and how fully does it establish the proposition advanced by the writer, while speaking of the hygienic efficacy of water—viz., that with proper diet, air, exercise, cleanliness and bathing, nineteen-twentieths of the ills to which we are subject might be totally eradicated; and that the great majority of those who now die in early and middle life might, by the means of prevention within the reach of all, be preserved to a good old age. Here we have the proof. During the first three years of the asylum, by the ignorance or neglect of the managers, or by both combined, between thirty and forty poor helpless orphans found a premature grave; and the guardians of these little innocents even consoled themselves with the consciousness of having done all that could be done, and that such was the dispensation of Providence. Thus they would make the throne of heaven answerable for the ignorance and follies of sublunary mortals. But, fortunately for humanity, during the next three years only three deaths occurred, simply from the adoption of a better system of dietetics, air, exercise, cleanliness, and from the daily use of cold or tepid baths, the necessary accompaniments of perfect health.

Of JOEL SHEW, M.D., of New York.

"Something upwards of four years ago it became my privilege to commence in a small way, the introduction of the new system of water treatment in New York. A little more than three years since I prepared a work entitled 'Hydropathy, or the Water Cure,' and soon after a cheaper one, designed for more general circulation, 'The Hand-book of Hydropathy.' These works have had considerable circulation, and the editions are now nearly exhausted.

"The water treatment, so called, practised to a greater or less extent in all ages, but owing its origin as a distinct and permanent system to Vincent Priessnitz, is the greatest discovery, the greatest improvement that ever yet came to man. The learned may say of Priessnitz that his wonderful cures were easily effected—that it was not water but the imagination, the pure air, the exercise, the mental repose, the regularity of habits and the temperance observed; or, that it was not by one circumstance, but by a combination of favorable agencies, that these cures were performed. What well-informed physician does not know that all this is neither more nor less than Priessnitz and his followers advocate as true. One thing is certain: the practice of this man has been attended with a greater degree of success than that of any other individual who has ever lived. No honest physician acquainted with the career of Vincent Priessnitz will deny this. Facts are facts, and cannot be overthrown.

"There are some striking facts relating to the progress of the 'water cure.' Physicians admit the power of our means, and contend for medicine only as the exception to the rule. Yet it is notorious how little confidence they have in the profession at large, or in the remedial agents they daily prescribe to their patients, when disease knocks at their own door.

"Priessnitz comes before the world with doctrines which he carried out in practice. He says practically, 'It is a law of nature, that in the sweat of thy brow thou shalt eat thy bread;' the sluggard, the gormand, and the inebriate cannot have health at any price. Health, like truth and everything good, must be wrought for. Perform honest labour daily, be cleanly, be seasonable in your hours, drive away the ten thousand useless corroding cares of artificial life. Be temperate in all your habits. Tea, coffee, tobacco, heating spices and exciting condiments, all act upon the same principle of drug substances and should be avoided, if you wish to enjoy happiness and health.

"From being an humble farmer in circumstances, Priessnitz has, through industry and strict honesty, become very rich. He is now estimated to be worth nearly a million of dollars—yet all his wealth and honours make no difference in his appearance or actions. The past year the King of Austria presented him with the highest medal awarded by the government. Distinctions without number have been conferred upon him; but he is still the same simple, plain, unpretending man.

"Water is the most common and abundant of all material substances on the face of the earth.

'All hail to pure cold water,
That bright rich gem from heaven;
And praise to the Creator
For such a blessing given;
And since it comes in fullness,
We'll prize it yet the more;
For life, and health, and gladness,
It spreads the wide earth o'er.'

What is there in nature so beautiful as water? In the form of genial spring showers that fertilize and render fructiferous the earth—in the opening flower-buds—in glistening dew drops—in sparkling fountains—in rivulets—in spring streams—in cascades—and in the delicate tear-drop that moistens the cheek of woman, how beautiful is this agent, everywhere so abundant—pure, simple water!

"The earth becomes dry and parched; flowers cease to put forth their blossoms; the trees yield no fruit; the grass withers, and the plains become dusty. At length the clouds begin to gather; the lambs are heard bleating upon the hills; the cows gambol, and the fowls prepare their feathers. The showers descend, and all nature with one uplifted voice praises that Being who sends the blessed gift.

"The inebriate, at the midnight revel, quaffs deep of the intoxicating bowl. His brain becomes fevered, and his body 'ill at ease.' When he began his inebriation he would have scorned the single beverage of nature; but now his sensations are imperious, and he longs for that drink which alone is sufficient to quench his thirst.

"A sick man has high, burning fever and delirium, which last for days. More earnestly than for all other blessings he begs for cold water to drink. In the belief that it is dangerous, he is denied. He grows worse: the tongue swells, the lips crack, and the pores become closed. In every breath that he puts forth, and in the exhalation that passes from his body, is being carried off its moisture; yet, strange though it be, his thirst no one dares to quench. At last, in his sufferings, he breaks over all restraint, and drinks to the fullest extent of his desire. Before sleepless, he now passes into a profound sleep. Drenching perspiration not unfrequently follows; and in the morning he awakens refreshed and in his right mind, and the power of his disease is broken up.

"Thus we have in water abundance, simplicity, purity, feebleness, not less than terrific power, awful grandeur, sublimity, beauty; the purest of all beverages, and the best of all means for healing the sick. Who can be sufficiently thankful for this, one of the best of heaven's gifts to our poor frail race—water!"

The Opinions of JOHN BELL, M.D., Professor of the Institutes of Medicine and Medical Jurisprudence, Member of the Medical and Kappa Lambda Societies, and Fellow of the College of Physicians, Philadelphia, and of the Georgofili Society of Florence, &c. &c.

"It is a just subject of surprise," says Dr. Bell, "that the practice of cold bathing, which is among the most ancient means of recreation and refreshment, and which has ever been received in the medical art as a remedy of considerable power, should still be under the dominion of fluctuating hypotheses, and be too often resorted to on the faith of the most remote analogies and perverted experience. But our wonder will be diminished by the reflection, that the circumstances under which it acquired celebrity in the eyes of the historical reader, and under which it has been so generally resorted to in all ages and countries, are well calculated to deceive as to its true character. Cold bathing was a part of the severest physical education of the Spartans, whose endurance of fatigue and privation is proverbial. We know that people in the earliest stages of society, engaged in war and the chase, or who led a pastoral life, and in whom there is found much bodily vigour, induced and sustained by regular labour, and simple aliment, have always been ready to plunge into the nearest stream, and recreate themselves with a natural cold bath. We learn that the Roman youth, while still panting and glowing with the sports of the *Campus Martius*, would jump into the Tiber, and thus make swimming succeed to the exercises on land. It is also a matter of familiar knowledge to us all, to find within the sphere of our acquaintance persons endowed with considerable bodily vigour, who make use habitually of the cold bath.

"Among the disorders for which cold bathing has been recommended, and will be found of essential service, we have, first, a class of persons, becoming, with the advance of civilization, every year more numerous; these suffer from sedentary life, devotion to the desk in business or study, and complain of a troublesome heat and dryness of the hands, and sometimes of the feet, with accelerated pulse and thirst: their appetite is not good, nor is their sleep sound or refreshing.

"2nd. There are many persons who, though enjoying what is often called full health, are liable to colds, rheumatic pains and stitches, from any slight exposure to cold or moist air. Their vascular and nervous systems are both excitable, and they are readily thrown into perspiration from even moderate exercise or warm apartments. In them, it is desirable so far to regulate the functions of the skin as to moderate its excitement, and prevent the consequent debility which follows this state. Cold bathing, properly regulated, accomplishes this purpose, and keeps the skin of a less uniform excitement, renders it less liable to sweat so freely from exposure to warmth, or by active exercise, and of course prevents the subsequent languor and susceptibility to morbid and enfeebling agencies.

"3rd. In fevers, so called by systematic writers, hemorrhages and

inflammations, internal as well as external, the most enlightened and, it is to be hoped, numerous portion of the medical profession, now recognize in the regular application of cold water, an important auxiliary to, and on occasions a substitute for *blood letting*. I shall not here enter into any retrospective view of the causes, whether from false theories among physicians, or ignorant prejudices among the people, which so long retarded the use of cold baths in fevers. The reform introduced by Sydenham, that of the cooling regimen, is but very imperfectly adhered to, when with the admission of cold fresh air into the apartments of the patient, is not coupled the administration externally and internally of cold water.

"4th. One of the most interesting accounts of the use of cold water, in modern times, is that given by Samoilowitz, in his history of the plague at Moscow, in Russia (1771)."

Dr. Bell then proceeds to relate the experience of Samoilowitz, illustrating the same by cases; from which it appears that water, in his hands, was almost a specific for that most terrific disease.

"5th. The principles which ought to guide us in the use of the cold bath, in febrile disease, being understood by the reader, it will be sufficient for me to mention briefly the varieties of fever in which the remedy has been successfully resorted to. In scarlet fever, cold bathing has displayed the best effects. The skin, of an acrid heat, high membranous irritation, involving the capillary and nervous tissues, without corresponding excitement of the general blood-vessel system, is a state of things calling for the sedation of cold, without allowing of extensive sanguineous depletion. The cold bath operates with promptness and decisive effects, since the impression produced on the skin is felt almost at the same moment throughout the digestive mucous surface. Upwards of a century ago, the internal use of common cold water, in scarlet fever, small pox and measles, and instances of the efficacy of this simple means to restore repelled eruption and bring on sweat, were pointed out; and yet, to this very day, the traditional faith in exclusively internal drugging, and external heat, maintains its ascendancy with the crowd, including many a physician.

"Of late years, we have examples of the success attending the use of cold water to the skin in *measles*. Thaer mentions many remarkable instances. The eruption will frequently be found to follow immediately the application of the water, and whenever it does appear, the subsequent symptoms will be very much moderated in violence.

"In fevers, vaguely called miliary and petechial—that is, in fevers in which petechial or miliary eruptions have been a common, though not an essential symptom—cold affusion has been used with great advantage. When resorted to at the first invasion of the fever, cold immersion will often cut it short, and prepare for prompt convalescence. Even when the disease is advanced, cold affusion will prove the most successful palliative.

"Cold, applied by means of a wet cloth to the back of the neck or to the scrotum, is a popular and very efficient remedy for stopping epistaxis, or *bleeding at the nose*.

"In hemoptysis, or spitting of blood from the lungs, the cold-bath, so long deemed a hazardous application, has been tried by several distinguished practitioners, with the best effects.

"In vomiting of blood, and in hemorrhage from the bowels, and hemorrhoids or piles, and uterine hemorrhage, although cold immersion is beneficial, yet, generally speaking, cold affusions or ablutions, with wet compresses over the part affected, will be found sufficient. In spitting or vomiting of blood, wet cloths applied over the stomach, frequently changed, will be found beneficial. In intestinal hemorrhage, over the abdomen generally; in vesical hemorrhage, and in piles, to the sacrum, perineum and gronis, and by injections of pure cold water to the bowels. The further addition of cold cloths to the pubes is proper in bleeding from the bladder. In chronic uterine hemorrhage, a cold hip bath should be taken frequently.

"In inflammations generally, cold directly applied to an inflamed part, or to a surface with which the former sympathises, will abstract the heat, already excessive; and by its sedative effect, diminish excitement of the nervous and capillary tissues, and, of course, diminish the secretion of caloric and the diameter of the vessels, thus allowing the part to resume its former condition.

"In burns, and external cutaneous inflammations of a somewhat similar character, such as erysipelas and sun-stroke, the practice of the external application of cold, rests on the principles already laid down.

"Resembling sun-stroke in many respects, and like it also requiring the free use of cold affusions, is the poisoning by narcotic drugs, such as opium, henbane, stramonium, &c.; also in poisoning with prussic acid."

Opinions and Experience of N. T. CALKINGS, M.D., of New York.

"Facts, carefully observed, collected and arranged, constitute the basis of all science. Such facts are rapidly establishing the scientific treatment of diseases by water—such facts are demonstrating the vastly important truth, that water, used with a discreet and persevering energy, in accordance with the true principles of physiology, and with judicious discrimination in varying conditions, is a universal cure. Some of those facts have been witnessed by the writer.

"More than fifteen years ago, I commenced the following treatment in fever (continued): the patient stood or sat in a large tub; two persons, one before and the other behind, each armed with a bucket of cold water, made a simultaneous dash upon the breast and shoulders. Without drying, he was wrapped in blankets, put into bed and sweated. When the fever returned, the dash was repeated, or resort was had to cold ablutions. Frequent and very copious injections of tepid water, were found of much efficacy in the relief of those distressing and oppressive feelings which constitute so much of a fever patient's misery. He was then enjoined to drink largely of cold water, and cold wet cloths were kept applied to the burning feet, instead of stimulating them with mustard

poultices. But little medicine was used, yet the practice was far more successful than any the writer had ever witnessed.

"In 1833, my wife was so violently attacked with inflammatory rheumatism, that she was soon unable to move either of the lower extremities, and the pain was excruciating to an almost intolerable degree. I had them immersed in a tub of cold spring water, and a stream of the same was kept pouring on them for hours. In two days, without a particle of medicine, the disease was cured.

"In the person of my son, I have recently cured, by the same means, and the additional use of the wet bandage, one of the most dangerous and obstinate local diseases known to physicians, viz., inflammation of the knee-joint.

"I am happy in being afforded the opportunity and privilege of giving this testimony to the public, through the reforming columns of a *Water Cure Journal*, that in the treatment of various diseases, I have been far more successful with water as medicine, than the most consummate skill can be with the whole armament of medicines known to the learned or the unlearned world."

The Experience of A. L. BARDWELL, M.D., of Troy, N. Y.

"I was very much afflicted with spinal affection for two years; various means had been used for my relief, but to no good purpose. I went to New Lebanon Springs, and there, under the direction of Dr. Bedortha, underwent a regular process at the Water Cure Establishment. When I commenced it, I could scarcely walk, and was in such pain that I could not sleep night nor day. I commenced on the 18th of August, and in less than four weeks, I walked nine miles easier than I could have walked one when I began the treatment. I was entirely freed from pain. I stayed four weeks and three days at the establishment, and have since kept up the treatment to some extent, and continue to improve."

Opinions and Experience of BENJAMIN RUSH, M.D., late Professor of the Institutes, and of Clinical Medicine in the University of Pennsylvania.

"In the treatment of bilious remittent fever," says Dr. Rush, "cold water was a most agreeable and powerful remedy. I directed it to be applied by means of napkins to the head, and to be injected into the bowels by way of glyster. *It gave the same ease to both, when in pain, which opium gives to pain from other causes.* I also advised the washing of the face and hands, and sometimes the feet, with cold water, and always with advantage. It is by suffering the body to lie for some time in a bed of cold water, that the inhabitants of the island of Massuah cure the most violent bilious fevers.* When applied in this way, it gradually

* Bruce's Travels.

abstracts the heat from the body, and thereby lessens the action of the system. It differs as much in its effects upon the body from the cold bath, as rest in a cold room differs from exercise in the cold and open air.

"I was first led to the practice of the partial application of cold water to the body, in fevers of too much force in the arterial system, by observing its good effects in *active hemorrhages*, and by recollecting the effects of a partial application of warm water to the feet in fevers of an opposite character. Cold water, when applied to the feet, as certainly reduces the pulse in force and frequency, as warm water, applied in the same way, produces contrary effects upon it. In an experiment, which was made at my request by one of my pupils, by placing the feet in cold pump water for a few minutes, the pulse was reduced 24 strokes in a minute, and became so weak as scarcely to be perceptible."

Opinions of JAMES JOHN HUNTER, M. D., of Newmarket, C.W.

"When the claims of the 'Water Cure' treatment were first advanced, in Europe, and to some extent in this country, I felt, in common with most members of the medical profession, strong prejudices against it, and doubted very much the propriety of introducing it into practice more extensively than the experience of the profession in general had found to be safe and efficacious. But the encouraging reports which were constantly being received, reports not written by the ignorant and designing, but by some of the brightest ornaments of our profession, declaring that water, at different temperatures and variously employed, was not only capable of palliating, but of completely subduing many of the most serious and intractable diseases, some of which, chronic rheumatism, gout, neuralgia, liver complaints, incipient consumption, asthma, &c. &c., had been considered the opprobrium of medical science, these detached statements induced me to seek information from the writings of those who had witnessed and experienced its effects. I perused most of the available works written on the subject, but from them could come to no satisfactory conclusion as to its merits or demerits; for, while some asserted that it was capable of entirely superseding the old practice, that it was a panacea for the cure of all the various forms of disease with which the human family are afflicted, and that only its adoption was necessary for man to become almost immortal—others, with more reason, assigned to it a more limited action, and considered it, what in reality it is, *an auxiliary remedy of vast power*. In consequence of these conflicting opinions, I determined to subject the matter to the *test of experience*, by which all questions in medicine should be *decided*. The diseases which appeared to me most unlikely to be benefitted by its use, were typhus and bilious fevers, when uncomplicated with serious organic lesion. Both these forms of fever prevailed extensively in this section of the country.

At first I was cautious in my cold applications, fearful lest congestion of important internal organs should take place, and serious if not fatal consequences follow; but by degrees I became bolder, as I found my

fevers were groundless, and the improvement of my patients justified my confidence. The rapidity of the recoveries was such as I never before experienced in my own practice, or witnessed in that of the best regulated hospitals. In the great majority of instances, the improvement was so decided, as to leave no doubt in my mind, that it was to water, and to water only, that I was indebted for the salutary change, and in many instances for the recovery of my patients; and I have no hesitation in saying, from what I have observed, that in the treatment of these diseases (typhus and bilious fevers) cold water, properly employed, is superior to all the drugs contained in the *Materia Medica*; and were I to refuse to adopt it under proper restrictions, I would be not only disregarding the dictates of my own conscience, but trifling with the best interests of my patients.

"On the 4th of August, I was called to visit the family of A. G.—. On my arrival, I found four persons ill with typhus fever of a low grade. Three of these persons were in the last stage; the other one had been sick about ten days. One of the first mentioned was beyond hope, and died a few hours after my arrival. The remaining three were immediately subjected to the cooling or hydropathic treatment. The effect was most salutary; it subdued the morbid and preternatural heat, lessened the frequency and force of the pulse, allayed the low muttering delirium and other symptoms of cerebral derangement incident to these fevers, and produced in a few days a decided amelioration in their condition. These patients, all three, ultimately recovered, but not with equal rapidity; for, while the one last afflicted and to whom the treatment was earliest applied speedily regained his usual health and strength, the other two, who had been four weeks ill previous to my first visit, recovered slowly, and were for two or three days in a very precarious state.

"On the 14th of August, five other members of the same family were taken ill. To these the treatment was immediately applied, with the effect of arresting the disease at once and restoring them to health within the *first week*. Now I feel confident, from the similarity of the symptoms and from the fact that all were exposed to the same exciting cause, that the last patients were afflicted with the same disease as the first, and that the disease would have run the same tedious if not fatal course, had it not been for the timely use of water.

"On the 2nd of October last, I was requested by the Board of Health in this village (Newmarket), to take temporary charge of the Inmigrant Hospital during the illness of the attending physician. This gave me an opportunity of testing the efficacy of hydropathic treatment in that form of fever which prevailed so extensively and fatally among the destitute immigrants during the past season. It was what I had long desired, for I was of the opinion then, as I am now, that the practice of using wine and brandy stimulants, in the treatment of typhus fever, so extensively adopted by many respectable medical men in this country, was unsound in theory and unsupported by experience. In the hospital, I found thirty-five sick, as follows, viz., twenty cases of uncomplicated typhus fever; five complicated with dysentery; and ten others variously afflicted.

The fever cases were immediately submitted to the 'Water Cure' treatment, varying the frequency and temperature of the baths according to the indications to be fulfilled and the peculiar condition of the patient. This, with occasional doses of medicine, was the only treatment resorted to; all stimulants being proscribed during the continuance of febrile action. At the expiration of sixteen days, I was enabled to report eighteen out of the twenty uncomplicated cases of fever, and three out of the five complicated with dysentery, convalescent; and during the whole period not one death had occurred, although previous to my attendance and the adoption of hydropathic treatment it was common for from one to three to die daily. Here then is the basis of my confidence in the new practice. I have tried both, and from a careful observance of symptoms and results have arrived at the following conclusion: that stimulants in typhus fever, while there is any preternatural heat of the body or cerebral derangement, are useless, if not positively injurious; nay, I will go further, I believe more cases would recover if left to the recuperative powers of nature, than when half-a-pint or a pint of wine or brandy is given daily; while water, properly employed internally and externally, will, *ceteris paribus*, as assuredly cut short and subdue all curable cases of typhus fever, as quinine will break a paroxysm of ague."

The opinions of JAMES HUNTER, SEN., M. D., of Brooklyn, C.W.

"It has long been an opinion of mine, that water used at different temperatures and applied as recommended by Currie, Floyer, and others, was capable of becoming a valuable therapeutic agent in the cure of disease; and I have, for the last twenty-six years, been in the habit of using it in the form of the hot and cold, mineral and saline baths, &c. Yet it was not until recently that I entered on any extensive investigation of its powers in the removal of chronic and nervous disorders, in the thousand forms in which they often afflict poor humanity.

"Having for the last eighteen months been myself the subject of such complaints, and having during that period been rendered entirely unable to endure either mental or corporeal exertion, and at times brought to the very verge of the grave, without deriving more than palliative benefits from the ordinary class of therapeutic agents, I have, through necessity, been compelled to test the efficacy of hydropathy, as recommended by modern writers on the subject. The primary seat of my disease was the stomach, and it shewed itself in the worst form of dyspepsia. From the stomach it extended to the liver, and soon involved the whole nervous system. All the functions became extensively deranged. For twelve months my skin was as dry as that of a dried fish, without one particle of moisture ever making its appearance. I had an intolerable headache, giddiness, ringing in the ears, and my sight and hearing became so much impaired that I began seriously to fear the loss of both senses: while obstinate constipation, cardialgia, palpitation of the heart, nervous tremblings, chronic bronchitic cough, and biliary derangement, but swelled

the catalogue of my woes. To such an extent was my nervous system affected, that I could not bend a joint without the risk of bringing on a violent and painful spasm in the part moved. And the least mental or corporeal excitement, or any thing but the most simple diet, would induce auras that would painfully pervade the entire system as rapidly as electricity.

"For the destruction of this hydra-headed monster, *cold water* and *low diet* alone have proved amply sufficient; and in the course of six weeks I have increased in weight nearly twenty pounds, and have been restored almost to my wonted health and vigor, sufficiently so to recommence my professional duties, which, from ill health, I had been obliged to discontinue during the past two years. Such have been the effects of hydro-pathy on me; and they have been nearly as effectual on Mrs. H., whose severe indisposition has had a longer continuance than mine. We are both now nearly restored to our former good health, and this too after the resources of medicine had failed in affording even temporary relief; and feel nothing necessary but a continuance in the same pleasant course to render its benefits permanent.

"I have now spent upwards of twenty-six years in extensive practice of my profession, and during that period I have thrice spent six months in the best hospitals and colleges that this continent affords, to study *modern improvements*; and I think I may say, I have spared neither time nor expense in the *investigation* of every thing new yet offered by the profession, for the alleviation of human misery, but, notwithstanding all these aids, *simple water alone* has proved, in my hands, much more effectual than their most potent agency."

MISCELLANEOUS OPINIONS

OF DISTINGUISHED WRITERS ON MEDICINE AND GENERAL SUBJECTS, ON
THE IMPORTANCE OF WATER AS A BEVERAGE.

"Pure and light waters are agreeable to the different natures and constitutions of all men. *No remedy can more effectually secure health and prevent diseases than pure water.* The drinking of water is serviceable in every complexion. Water proves agreeable to persons of all ages. Drinkers of water, provided it be pure and excellent, are more healthy and long-lived than such as drink wine or malt liquors; it generally gives them a better appetite, and renders them plump and fleshy. Those who drink water are observed to have much whiter and sounder teeth than others. Drinkers of water are brisker and more alert in all the actions both of mind and body than such as use malt liquors. *Water is a remedy suited to all persons at all times; there is no better preservative from distem-*

pers ; it is assuredly serviceable both in chronic and acute diseases, and its use answers to all indications both of preservation and cure. The major part of the efficacy of mineral waters is, beyond all dispute, owing to the quantity of pure elementary water they contain."—HOFFMAN.

"Water drinkers are temperate in their actions, prudent and ingenious; they live safe from those diseases which affect the head, such as apoplexies, palsies, pain, blindness, deafness, gout, convulsions, trembling and madness. Water resists putrefaction and cools burning heats and thirsts, and after dinner it helps digestion. To the use of this children ought to be bred from their cradles; because all strong drinks are injurious to the constitution of children, whose spirits they inflame, and render them mad, foolish, tender, rash, and intemperate in their passions."—SIR JOHN FLOYER.

"Simple water, such as nature affords it, is, without any addition, the *proper drink of mankind*. All drinks which supply the necessary liquid for the support of the functions of the animal economy, do it only by the quantity of elementary water they severally contain."—CULLEN.

"Water, as it is the most ancient, so it is the best and most common fluid for drink, and ought to be esteemed the most commodious for the *preservation of life and health.*"—PARR.

"If people would but accustom themselves to drink water, they would be more free from many diseases, such as tremblings, palsies, apoplexies, giddiness, pains in the head, gout, stone, dropsy, rheumatism, piles, and such like, which diseases are most among them that drink strong or artificial drinks, and which water generally would prevent."—DR. PRATT.

"Water is of inestimable benefit to health; and as it neither stimulates the appetite to excess, nor can produce any perceptible effect upon the nerves, it is admirably adapted for diet, and we ought perhaps by right to make it our sole beverage, as it was with the first of mankind and still is with all the animals. Pure water dissolves the food more, and more readily, than that which is tinctured by any thing dissolved in it, and likewise absorbs better the acrimony from the juices; that is to say, it is more nutritious, and preserves the juices in their natural purity. It penetrates easily through the smallest vessels, and removes obstructions in them, nay, when taken in a large quantity, it is a very potent antidote to poison. From these main properties of water may be deduced *all the surprising cures which have been effected by it in so many diseases.*"—DR. REID.

"The sole primitive and mainly natural drink is water, which, when pure, whether from a spring or river, has nothing noxious in it, and is suitable and adapted to all sick persons and all stomachs, however delicate and infirm, unless through depraved habits fermented liquor should have become necessary. Pure spring water, when fresh and cold, is the best and most wholesome drink and the most grateful to those who are thirsty, *whether they be sick or well*; it quenches thirst, cools the body, dilutes and thereby obtunds acrimony, often promotes sweat, expels noxious matters, resists putrefaction, aids digestion, and in fine strengthens the stomach."—DR. GREGORY.

"Without all peradventure, water was the primitive original beverage, and it is the only fluid fitted for diluting, moistening and cooling—the ends of drink appointed by nature. Happy had it been for the race of mankind, if other *mixed* and *artificial* liquors had never been invented. It has been an agreeable appearance to me to observe with what freshness and vigour those who, though eating freely of flesh meat, yet drank nothing but this element, *have lived in health and cheerfulness to a great age*. Water alone is sufficient and effectual for all the purposes of human wants and drinks."—DR. CHEYNE.

"Cold water is the most proper beverage for man as well as for animals; it cools, thins, and clears the blood; it keeps the stomach, head, and nerves in order, and makes man more tranquil, serene and cheerful."—FAUST.

"Simple aqueous drinks promote digestion, by facilitating the solution of the solids and by serving as a vehicle to their divided parts. The least compound drinks are possessed in different degrees of the double property of dissolving solid aliments and stimulating the digestive organs. The purest water is rendered stimulating by the air which it contains in different proportions."—DR. RICHERAND.

"Water is beyond question the most natural drink—that of which man made use in times of primæval manners. Those who take it in moderation enjoy to a very high degree all the faculties, as well moral as intellectual, and often obtain very advanced age."—ROSTAN.

"Water drinkers are in general longer lived, are less subject to decay of the faculties, have better teeth and more regular appetites, than those who indulge in more stimulating diluents (tea, coffee, fermented drinks, &c.) for their common drink."—DR. SAUNDERS.

"*Water alone is the proper drink of every animal.*"—ARBUTHNOT.

"Water is, of all drinks, that which by its constant use is best fitted to aid in prolonging the life of man."—LONDE.

"The water drinker enjoys an exquisite sensibility of palate and relish for plain food, that a wine drinker has no idea of. Happy are the young and healthy, who are wise enough to be convinced that water is the best drink and salt the best sauce."—KITCHENER.

"Young officers (and officers do not differ in this respect from other men) should drink nothing habitually but water, because it is decidedly the most conducive to vigorous health."—DR. BARTON.

"Water is the most suitable drink for man, *and does not chill the ardour of genius. Demosthenes' sole drink was water!*"—ZIMMERMAN.

"I maintain with confidence that spirituous liquors do not lessen the effects of hard labour upon the body. Look at the horse, with every muscle of his body swelled from morning till night, in the plough or the team, does he make signs for spirituous liquors to enable him to cleave the earth or climb the hill? No. He requires nothing but cool water and substantial food; and the same is true of man."—DR. RUSH.

"Man is the only animal accustomed to swallow unnatural drinks, or to abuse those which are natural; and this is a fruitful source of a great variety of his bodily and mental evils."—REES' CYCLOPÆD.

"The waste of the fluid parts of our bodies requires the use of drink to repair it, and we derive a sensible gratification from quenching our thirst. Who has not observed the extreme satisfaction which children derive from quenching their thirst with pure water? While we adhere to this simple beverage, we shall be sure to have an unerring prompter to remind us when we really require drink, but the moment we depart from pure water we loose this inestimable guide, and are left not to the real instincts of nature, but to an artificial taste, in deciding on actions intimately connected with health and long life. And this is true not only of fermented or distilled liquors, but in a less degree of any and every addition made to pure water to make it more palatable. Under the guidance of the instincts our Creator has implanted in us, we are safe; but as soon as we leave these, and place ourselves under the direction of our own educated appetites, we are constantly liable to be led into danger."—DR. OLIVER.

"Pure water is the fluid designed by nature for the nourishment of all bodies, whether animal or vegetable. Water drinkers are observed to be more *healthy* and long lived than others. In such, the faculties of the mind and body are more strong, their teeth more white, their breath more sweet, and their sight more perfect, than in those who use artificial drinks, &c."—DR. LEAK.

"Water is as well adapted to man's natural appetite as the physical wants of his organs. A natural thirst, and the pleasure derived from its gratification, were given us to secure to the vital machinery the supply of liquid necessary to its healthy movements. When this natural thirst occurs, no drink tastes so good and in truth none is so good as water; none possesses adaptation so exact to the vital necessities of the organs."—DR. MUSSEY.

"The best drink is water: a liquor commonly despised, and even considered as prejudicial. I will not hesitate, however, to declare it to be one of the greatest means for prolonging life. The element of water is the greatest and only promoter of digestion. By its coldness and fixed air it is an excellent strengthener and reviver of the stomach and nerves. It assists all the secretions of the body, and is a powerful preventive of bile and putrefaction."—DR. HUFELAND.

"If drink be merely required for allaying thirst and dryness, and diminishing the tenacity and acrimony of the fluids, then is cold water, when limpid, light, and without smell and taste, and obtained from a clear running stream, the best drink for a robust man. Food not too fat or gross, and water as drink, render our bodies the most firm and strong."—BOERHAAVE.

"When men contented themselves with water, they had more health and strength; and at this day, those who drink strong liquors raise the heat of the stomach to excess, whereas water keeps it in due temper. Hot blood is the cause of flushes, rheuma, ill digestion, pains in the limbs, headache, dimness of the sight, and especially of hysteric vapours."—DR. DUNCAN.

"In regard to diet with a view to the preservation of health, no one

rule is of so much importance as to avoid all sorts of compound liquors. Water being the only wholesome beverage, the best solvent and diluent of the solid portions of our food, and furnishing the most simple, the most bland, and most manifestly the most suitable supply to the secretory vessels and general humidity of the body. In a word, good water is the only fit and salutary liquor for the ordinary uses of man; all others are noxious, and that in proportion as they recede in their qualities from water. There is no animal (man excepted) that does not reject artificial liquors with disgust; and from an impartial survey of human society in general, it will be found that those who use water only, as their general beverage, are, *ceteris paribus*, the most free from disease, and retain the vigour of life and its different functions to a more advanced age."—
A PHYSICIAN.

A FEW EXTRACTS FROM THE PUBLISHED OPINIONS OF SOME OF THOSE
WHO HAVE DERIVED BENEFIT FROM HYDROTHERAPEUTIC TREATMENT.

"Previous to coming to Malvern, I was considered by some of the most eminent of the faculty to be in a hopeless state. * * * * * I was nearly reduced to a skeleton. The spasms of the stomach and about the heart seemed to threaten me with sudden death. In short, I did not consider my life safe from hour to hour. After nearly three months of treatment, my body is well covered with hard solid flesh, my appetite and sleep are good, and my other functions in excellent order."—F. BEAUMAN, *Rear Admiral*.

"During nine months before I came under hydropathic treatment, I was unable to move without my crutches; and a great part of that nine months I passed in my bed, or on my sofa. My nights were restless, my pulse high, and my tongue charged. I am now turned sixty-three years, and have been subject to the gout for more than *forty* years. My knees, hands, and other parts, were so crippled that I had made up my mind to pass the rest of my days in my arm-chair, or to hobble about with my crutches. The treatment has so ameliorated my situation, that I can now go up and down stairs, with ease and comfort, without a stick, and the other day walked half a mile on the high road. My general health, I thank God, is as well as ever it was. I sleep well, my appetite is good, and I use my arms freely; in fact, I feel myself comfortable and independent."—T. C. MARSH.

"I have been severely afflicted, for the last sixteen or seventeen years, with a most violent tic douloureux in my face, and when I came under treatment was also suffering from stomach asthma, the liver complaint, and swelled and dropsical ankles, all of which are now perfectly removed, and my stomach is wonderfully restored to its former state of health, which had been upset for years by the powerful medicines given to remove the distressing tic douloureux."—THOS. STANTON ST. CLAIR, C. B. & K. H., *Colonel*.

"1. The Cadet, Prince Lichtenstein, of middle size and of a full and corpulent habit of body, had received, while on service in Italy, a gun-shot wound in the leg, which injured the tibia. The wound remained open for two years, generating into a foul and fistulous ulcer, and discharging fetid sanies, accompanied with caries of the bone. The surgeons of Vienna advised amputation, and as a last resort he went to Gräfenberg, and put himself under the care of Preissnitz. The diseased or carious bone was gradually exfoliated. The ulcer, soon after the commencement of the treatment, assumed a healthy action and appearance, and was nearly healed at the prince's departure. He fully recovered the use of his leg.

"2. A young Scotch gentleman had contracted syphilis two years before his visit to Gräfenberg, was treated with mercurial inunction, blue pills and corrosive sublimate. He had suffered from a mercurial eruption, and pains in the head, joints and spine, ulcerated sore throat, loss of appetite, and extreme emaciation. He was benefitted by the use of the hydriodate of potass and the compound decoction of sarsaparilla; but the pains in his head and joints, loss of appetite, debility and emaciation, continued, combined with a hysterical affection, that caused him frequently to shed tears involuntarily. In this state he consulted Priessnitz, and went through the whole curriculum of the cure. The treatment caused a mercurial eruption, and promoted the discharge of the mercury accumulated in his system. In four months he was perfectly restored to health, and regained his strength, flesh and appetite. He frequently walked twenty or thirty miles a day, and was free from every pain. This was the best and most complete cure that fell under my observation."—R. H. GRAHAM, M. D.

Extract from a letter to Dr. Wilson, of Malvern, from the Most Noble the MARQUIS OF ANGLESEA.

"Being convinced that if anything can relieve me from my most dreadful of all disorders, your skill, and zeal and great experience and prudence will bring me *through*; I mark this latter word more particularly, because I hear of the most absurd and malicious reports being abroad of your having very nearly killed me. * * * * * Since the time I came under your treatment, I have never for a single day had occasion to assist in any way whatever stubborn bowels, which reluctantly yielded for years and years to the most powerful and pernicious drugs. For six or eight and twenty years a desperate malady (*tic douloureux*) has been in full possession of me, and has probably been immensely aggravated by the swallowing of a mass of the most violent and offensive drugs. It is no wonder, I say, that even water cannot in thirteen months effect a cure. But it ~~has~~ kept me in excellent and even robust general health; and if, instead of being *seventy-five*, I was only fifty-five, I should not be without hope of your totally subduing the enemy. If I do outlive it, I shall owe it entirely to your system; so persevere, my good doctor, as you have hitherto done, and believe me you will have a confiding patient.

And may the admirable system you have introduced into this country go on and prosper through good report and bad report. * * * *

Lady Adelaide is in high health, and a steady advocate of the Water Cure, and I hear most favourable reports of Lord Lichfield. &c. &c.

"ANGLESEY."

"I had stomach asthma and spasms of the stomach in their severest forms, with indigestion and constipation of the bowels, and torpid liver of many years standing. I was treated with bleeding, leeching, blisters and medicines, but all my symptoms returned again with the same severity. I then tried the mineral waters, with no benefit, suffering two severe attacks while taking them. In this miserable state, I determined to try hydropathic treatment. I am in every way more than satisfied with the result. After from three weeks to a month's treatment, I met by accident my friend the Rev. Mr. —, who did not recognize me with my altered appearance. When I came under treatment, in August, I was clothed in flannel and wore a great coat, and was still chilly and cold. Now, in October, I am without flannel, wear a single light coat, and am warm and comfortable."—J. DOUGLASS DE WENT, *Captain 44th Regiment.*

"It is not my intention, Mr. Editor, to detail the course I underwent. The different resources of water as a medicament are to be found in many works easily to be obtained, and well worth the study. In this letter, I suppose myself to be addressing those as thoroughly acquainted with the system as myself was at the first, and I deal therefore only in generals.

"The first point which impressed and struck me, was the extreme and utter innocence of the Water Cure in skilful hands. Certainly, when I went, I believed it to be a *kill or cure* system. I fancied it must be a very violent remedy; that it doubtless might effect great and magical cures, but that if it failed it might be fatal. Now, I speak not alone of my own case, but of the immense number of cases I have seen; patients of all ages, all species and genera of disease, all kinds and conditions of constitution, when I declare, upon my honor, that I never witnessed one dangerous symptom produced by the Water Cure, whether at Dr. Wilson's or the other hydropathic institutions which I afterwards visited. And though, unquestionably, fatal consequences might occur from gross mismanagement, and as unquestionably have so occurred at various establishments, I am yet convinced that water in itself is so friendly to the human body, that it requires ignorance and presumption to produce results really dangerous; that a regular practitioner does more frequent mischief from the misapplication of even the simplest drugs, than a water doctor of very moderate experience does or can do by the misapplication of his baths and frictions. And here I must observe, that those portions of the treatment which appear to the uninitiated as the most perilous, are really the safest, and can be applied with the most impunity to the weakest constitutions; whereas those which appear, from our greater familiarity with them, the least startling and most innocuous, are those

which require the greatest knowledge of general pathology, and of the individual constitution.

"The next thing that struck me, was the extraordinary ease with which, under this system, good habits are acquired and bad habits relinquished. The difficulty with which, under orthodox medical treatment, stimulants are abandoned, is here not witnessed. Patients accustomed for half a century to live hard and high, wine-drinkers, spirit-bibbers, whom the regular physician has sought in vain to reduce to a daily pint of sherry, here voluntarily resign all strong potations, after a day or two cease to feel the want of them, and reconcile themselves to water as if they had drank nothing else all their lives. Others who have had recourse for years and years to medicine, their potion in the morning, their cordial at noon, their pill before dinner, their narcotic at bed time, cease to require these aids to life, as if by a charm. Nor this alone. Men to whom mental labour has been necessary, who have existed on the excitement of the passions and the stir of the intellect, who have felt—these withdrawn—the prostration of the whole system, the lock to the wheel of the entire machine, return at once to the careless spirits of the boy in his first holiday.

"Here lies a great secret. Water thus skilfully administered is in itself a wonderful excitement; it supplies the place of all others, it operates powerfully and rapidly upon the nerves, sometimes to calm them, sometimes to irritate, but always to occupy. Hence follows a consequence which all patients have remarked, the complete repose of the passions during the early stages of the cure; they seem laid asleep, as if by enchantment. The intellect shares the same rest; after a short time, mental exertion becomes impossible, even the memory grows far less tenacious of its painful impressions, cares and griefs are forgotten, the sense of the present absorbs the past and future, there is a certain freshness and youth, which pervade the spirits and live upon the enjoyment of the actual hour. Thus are the great agents of our mortal wear and tear, the passions and the mind, calmed into strange rest. Nature seems to leave the body to its instinctive tendency, which is always towards recovery. All that it interests and amuses is of a healthful character; exercise, instead of being an unwilling drudgery, becomes the inevitable impulse of the frame, braced and invigorated by the element. A series of reactions is always going on; the willing exercise produces refreshing rest, and refreshing rest willing exercise. The extraordinary effect which water taken early in the morning produces on the appetite, is well known amongst those who have tried it, even before the Water Cure was thought of: an appetite it should be the care of the skilful doctor to check into moderate gratification. The powers of nutrition become singularly strengthened, the blood grows rich and pure; the constitution is not only amended—it undergoes a change.

"The safety of the system then struck me first; its power of replacing, by healthful stimulants, the morbid ones it withdrew, whether *physical* or *moral*, surprised me next; that which thirdly impressed me was no less contrary to all my preconceived notions. I had fancied that, whether good or bad, the system must be one of great hardship, extremely repug-

nant and disagreeable. I wondered at myself to find how soon it became so associated with pleasurable and grateful feelings, as to dwell upon the mind amongst the happiest passages of existence. For my own part, despite all my ailments or whatever may have been my cares, I have ever found exquisite pleasure in that sense of being which is, as it were, the conscience, the mirror of the soul. I have known hours of as much and as vivid happiness as perhaps can fall to the lot of man; but, amongst all my most brilliant recollections, I can recal no periods of enjoyment at once more hilarious and serene than the hours spent on the lonely hills of Malvern, none in which nature was so thoroughly possessed and appreciated. The rise from a sleep as sound as childhood's—the impatient rush into the open air, while the sun was fresh and the birds first sang—the sense of an unwonted strength in every limb and nerve, which made so light of the steep ascent to the holy spring—the delicious sparkle of that morning draught—the green terrace on the brow of the mountain, with the rich landscape wide and far below—the breeze that once would have been so keen and biting, now but exhilarating the blood and lifting the spirits into religious joy; and this keen sentiment of present pleasure rounded by a hope, sanctioned by all I felt in myself, and by nearly all I witnessed in others, that the very present was but the step, the threshold, into an unknown and delightful region of health and vigour; a disease and a care dropping from the frame and the heart at every stride.

“I staid some nine or ten weeks at Malvern, and business, from which I could not escape, obliging me to be in the neighbourhood of town, I continued the system seven weeks longer under Dr. Weiss, of Petersham. During this latter period, the agreeable phenomena which had characterised the former, the cheerfulness, the *bien aise*, the consciousness of returning health, vanished, and were succeeded by great irritation of the nerves, extreme fretfulness, and the usual characteristics of the constitutional disturbance to which I have referred. I had every reason, however, to be satisfied with the skill and care of Dr. Weiss, who fully deserves the reputation he has acquired and the attachment entertained for him by his patients. Nor did my judgment ever despond or doubt of the ultimate benefit of the process. I emerged at last from these operations in no very portly condition. I was blanched and emaciated, washed out like a thrifty housewife's gown—but neither the bleaching nor the loss of weight had in the least impaired my strength; on the contrary, all the muscles had grown hard as iron, and I was become capable of great exercise without fatigue. My cure was not effected, but I was compelled to go into Germany. On my return homewards, I was seized with a severe cold, which rapidly passed into high fever. Fortunately, I was within reach of Doctor Schmidt's magnificent hydropathic establishment, at Boppart; thither I caused myself to be conveyed, and now I had occasion to experience the wonderful effect of the Water Cure in acute cases. Slow in chronic, its beneficial operation in acute is immediate. In twenty-four hours all fever had subsided, and on the third day I resumed my journey, relieved from every symptom that had before prognosticated a tedious and perhaps alarming illness. I had always suffered so severely in winter, that the severity of our last one gave me

apprehensions, and I resolved to seek shelter from my fears at my beloved Malvern. I here passed the most inclement period of the winter, not only perfectly free from the cold, rheum and catarrhs, which had hitherto visited me with the snows, but in the enjoyment of excellent health; and I am persuaded that, for those who are delicate and who suffer much during the winter, there is no place where the cold is so little felt as at a Water Cure establishment. I am persuaded also, and in this I am borne out by the experience of most water doctors, that the cure is most rapid and effectual during the cold season—from autumn, through the winter. I am thoroughly convinced that consumption, in its earliest stages, can be more easily cured and the predisposition more permanently eradicated, by a winter spent at Malvern, under the care of Doctor Wilson, than by the timorous flight to Pisa or Madeira. It is by *hardening* rather than by *defending* the tissues, that we best secure them from disease.

"The remedy is *not* desperate; it is simpler, I do not say than any *dose*, but than any *course* of medicine; it is infinitely more agreeable; it admits no remedies for the complaint which are inimical to the constitution; it bequeaths none of the maladies consequent on blue pill and mercury, on purgatives and drastics, on iodine and aconite, on leeches and the lancet. If it cure your complaint, it will assuredly strengthen your whole frame; if it fails to cure your complaint, it can scarcely fail to improve your general system. As it acts, or ought scientifically treated to act, first on the system, lastly on the complaint, placing nature herself in the way to throw off the disease; so it constantly happens, that the patients at a hydropathic establishment will tell you that the disorder for which they came is not removed, but that in all other respects their health is better than they ever remember it to have been. Thus I would not only recommend it to those who are suffering from some grave disease, but to those who require merely the fillip, the alterative, or the bracing, which they now often seek in vain in country air or a watering place. For such, three weeks at Malvern will do more than three months at Brighton or Boulogne; for at the Water Cure the whole life is one remedy—the hours, the habits, the discipline, not incompatible with gaiety and cheerfulness (the spirits of hydropathists are astounding, and in high spirits all things are amusement), tend perforce to train the body to the highest state of health of which it is capable.

"The Water Cure, as yet, has had this evident injustice—the patients resorting to it have mostly been *desperate* cases. So strong a notion prevails that it is a desperate remedy, that they only who have found all else fail have dragged themselves to the Bethesda pools. That all, thus not only abandoned by hope and the college, but weakened and poisoned by the violent medicines absorbed into their system for a score or so of years—that all should not recover is not surprising! The wonder is, that the number of recoveries should be so great; that every now and then we should be surprised by the man, whose untimely grave we predicted when we last saw him, meeting us in the street ruddy and stalwart, fresh from the springs of Grofenberg, Boppard, Petersham, or Malvern."—*Extracts from the letter of SIR EDWARD LYTTON BULWER.*

THE TYPHUS, SHIP, OR EMIGRANT FEVER.

Under this title I will endeavour to associate, with a brief outline of the disease, as many facts relating to its prevention and cure as possible, in order that my description may prove valuable to all, should this country during the present season be visited with this pestilential scourge of the past.

To make the subject more clear to unprofessional readers, I will arrange the points deserving our consideration under the following heads: 1. Symptoms. 2. Causes, predisposing and exciting. 3. Critical symptoms. 4. Means of prevention. 5. Treatment.

I. *The symptoms* indicating typhus fever, are a disinclination for either mental or corporeal exertion. The patient feels a sensation of stupidity, indolence, or inability, accompanied by slight chills, hot flushes, yawning and stretching; his gait is unsteady, and he complains of aching pains in his legs, and not unfrequently of nausea or sickness at the stomach; his face becomes flushed, his eyes suffused with blood, and ringing in the ears, dizziness and confusion of thought follow; the pulse is frequent, though generally soft and feeble; the tongue, at first coated with a thin white fur, becomes, as the disease advances, of a brown colour; blood oozes from the gums, and accumulates about the teeth, causing the mouth to be very offensive; great thirst exists; a craving for cold drinks and loss of appetite. One of the earliest symptoms is that of an impairment of the mind; the patient, if able to go about, will frequently be found in an apathetic, stupid, dreamy forgetfulness, with his eyes fixed intently on some senseless and uninteresting object. This state is soon followed by delirium, at first only in the night, but which soon becomes continuous. When spoken to he can be roused to consciousness, but answers questions with great hesitancy, and immediately elapses into the same state. He will gaze at you, while speaking, with an expression of enquiry, appearing at the same time to be completely bewildered. The skin is dry and hot from the first, the natural perspiration suppressed, and the secretion from the kidneys scanty and high coloured.

These are a few of the more prominent symptoms, which distinguish this dreadful disease in its early stage or during the first eight or nine days of its duration. There are many others; but some of them are less common, and others would only be recognized by the physician.

II. *The causes* of this disease, as of all others, may be divided into two classes—*predisposing* and *exciting*. The first class are those peculiar conditions of the system which render it more liable to contract the disease on exposure to the second class, or exciting causes, which are those circumstances or agents which determine the nature of such disease.

The following may be considered predisposing causes :—

1st. Prior to an attack of fever, or in fact of any disease, some *functional derangement* always exists, which derangement is more frequently the cause of the disease that follows, than the effect of it. The bowels

may be confined—the secretion from the kidneys diminished, or perspiration checked, thereby retaining the impurities within the body, and allowing them to circulate again and again through the same channels, until morbid symptoms are set up in some organ of the body, when we pronounce the person “sick.”

There is no truth in medicine better established than this, that persons in a state of perfect health—when the system receives a due supply of proper food, and regularly casts off all the refuse and disorganized matters; when an equilibrium exists between the conservative and destructive powers; in fact, when all the functions of the economy are duly performed—enjoy an almost certain immunity against disease, while any disturbance of this equilibrium will as assuredly render them liable on exposure.

2nd. *The use of wine (and all spirituous liquors)* tends to increase the liability to the disease, by weakening the whole system, particularly when taken in excess and frequently repeated.

3rd. *Fatigue from over exertion* leaves the body in an unfavourable condition for resisting the assaults of the enemy; but active exercise without fatigue is beneficial in preserving the equilibrium of health.

4th. *Grief and fear* have a similar effect. They depress the powers of resistance, destroy the appetite, and with it the nutrition of the whole body.

These, with a want of due regard for cleanliness, are some of the conditions which render all liable to disease, and particularly so if the exciting cause be contagion; and should be guarded against by all who know how to prize the blessing of health.

The only primary or exciting cause of typhus fever, of which I shall speak, is the inhaling of concentrated animal exhalations, no matter whether such exhalations be from healthy or unhealthy persons. The first generally originates the disease: the latter causes its spread. Hence we find, that during the past season, typhus fever of a most inveterate character was generated on ship-board, in healthy crews, by confining too many persons within a small compass, without sufficient food, water, means of cleanliness or ventilation. During rough weather, the hatches of emigrant ships were of necessity closed, thereby cutting off all access to the fresh air, and obliging the unfortunate emigrants to receive into their lungs, instead of pure air, the breath and other emanations expelled by themselves and their comrades in misery.

If the inhalation of this impurity will generate the disease under such circumstances, how sedulously should we avoid allowing the same impurity to become concentrated within our own bodies, and to circulate through our blood, which must be the case, to a greater or less extent, whenever the natural outlets are closed.

Illustrations of the second form of infection, or that originated by inhaling emanations from the bodies of those labouring under the fever, need hardly be given; the frequency of such contaminations renders their existence too well known to require mention here.

III. The symptoms prognosticating a *favourable termination* are, a great increase in the urinary secretion, with the deposition of a sediment; the

occurrence being attended by diarrhoea, or the appearance of boils or other morbid eruptions, particularly the latter.

All these symptoms are indicative of a favourable termination, and such a result is undoubtedly the case.

IV. To prevent the occurrence of the fever, the most careful observation should be kept of the infected persons, and the measures should be taken to prevent the spread of the disease, which rising from a natural effort.

The following are the most serviceable to the patient, and the most injurious to the community, and out of the reach of the patient.

1. Rise early.
2. Avoid dampness.
3. Keep the room dry, but avoid medicines.
4. Let the patient be found in the proper quarters.
5. Drink the liquor of the system.
6. In the possible, clean the patient.
7. Never during the fever.
8. Bathing with friction with the hands.
9. Is the patient in the windows and carpets and windows and
10. Arise early, quick-lime, and the
11. Pay attention to the through evaporation.

occurrence of spontaneous perspiration, having an offensive odour, and being attended by an abatement in the heat of the body; moderate diarrhoea, with a decline of the head symptoms and fever; the formation of boils or abscesses in different parts; and eruptions of the skin, particularly those about the mouth and ears.

All these discharges appear to act critically, by ridding the system of noxious matters, in the same manner that small-pox pustules throw off the poisonous virus of that disease. One thing is certain—recovery from fever never takes place without the occurrence of some critical discharge, and such discharge, whether it be from the skin, bowels, kidneys, &c., undoubtedly does, in some way, purify the system from the febrile poison.

IV. To prevent the spread of this fever, all those sanatory means which careful observation and statistical proof have found efficacious in warding off the infection, should be recommended by the profession, and rigidly observed by the public. It is by this means alone, and the improvement of our general health, that we can hope to allay those superstitious fears, which rising instinctively on the approach of evil, tend to paralyze every natural effort of the economy.

The following rules for the preservation of health, will be found of service to all who have sufficient restraint to refrain from the use of injurious articles of food and diet, and industry and perseverance to follow out the recommendations.

1. *Rise early, and do not retire late*: keep good hours.
2. Avoid exposure to night air, unless well protected from its dampness.
3. Keep your body open, by cold or warm water lavements if necessary, but avoid, except in cases of extreme urgency, cathartic and other medicines. See that you *perspire* daily, and that other discharges are in proper quantity.
4. Let your diet be light and nutritious. Oatmeal or Indian meal will be found the best article for supper. Never use meat on going to bed.
5. Drink nothing but cold water. Avoid tea, coffee, and spirituous liquors of all kinds; they are unnatural, derange and weaken the powers of the system, and strongly predispose to disease.
6. In the summer season, linen clothing should be worn as much as possible, changed at least twice a week.
7. Never sleep in the same room with the clothes you have worn during the day. Hang them in an open hall.
8. Bathe your body daily in pure cold water, and follow each bath by friction with a coarse towel, and exercise.
9. Is your house in the vicinity of fever patients? If so, take up your carpets and have your floors scoured every second day, and your doors, windows and frame work well washed at least twice a week.
10. Are your walls covered with paper? If not, whitewash them with quick-lime, giving them a fresh coat every fortnight during the continuance of the disease in your neighbourhood.
11. Pay strict attention to ventilation—allow a free circulation of air through every part of your house. A window opened opposite a fire-place,



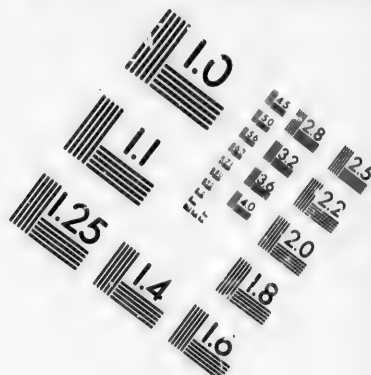
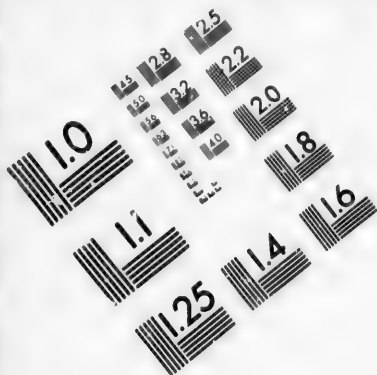


IMAGE EVALUATION TEST TARGET (MT-3)



will establish a current of air through the chimney, an addition worth remembering.

12. Have you curtains on your beds or windows? If so, remove them; they prevent the free circulation of air, and form lodgments for contagion.

13. Is your bed placed at the side of the room, or in a corner? If so, remove it to the centre.

14. Change your bed-linens at least weekly.

Or if you have the fever *in your own house*, in addition to the above, the following must be observed:—

1st. The sick chamber must be stript of everything not absolutely necessary for the comfort of the patient. Carpets, curtains, valances, table-covers, sofas and the like, are not only useless but injurious; therefore they should be removed.

2nd. The floors should be scoured daily, and sprinkled morning and evening with a solution of chloride of lime.

3rd. The beds should be made daily, and the linens well aired, and sprinkled with the solution.

4th. The windows and frame-work of the sick chamber should be washed every morning with the same solution, which is prepared as follows:—Dissolve one pound of chloride of lime in four gallons of water, and allow it to settle. Then pour off the clear liquor and bottle for use. Shallow vessels, having large surfaces, and containing some of the same, should be placed in different parts of the room.

5th. All excrementitious matters must be removed as soon as voided.

6th. The face, hands and neck of the patient should be washed with a sponge and clean water *thrice* each day, and his linen should be changed every second day. Personal cleanliness is of the greatest importance.

7th. If possible, the patient should be removed to an adjoining room while the sick chamber is being purified.

8th. All bed and body linens should be dipped in the solution for a few minutes, and then put to steep in cold water, before being sent to the wash.

V. Of the *treatment*, it is not my intention to enter into details, as such a course could not in any way benefit the general reader, for whom this little work is intended; and medical men can readily consult those works designed for their special use, should they deem the subject worthy of their consideration. But the object of my remarks will be to shew, in as strong a light as possible, the comparative merits of the two forms of treatment, adopted by their respective advocates, for the cure of this disease, viz., the allopathic, or drug and stimulating, and the hydrotherapeutic, or cooling, taking at the same time a brief glance at their respective results, as pointed out by observation and experience. In doing so I shall be enabled to give some of the reasons which influenced me in adopting the latter practice, so powerfully recommended to my mind by its constant companionship with that best of criterions, uninterrupted success, in preference to the former, in which I had been educated.

In the first place, the cause of fever I assume to be either a diseased

condition of the blood itself, or the circulation in it of a poison generated by the human body, under peculiar circumstances; which poison, pervading every part, produces a paralyzing effect upon the muscular, vascular, and nervous systems, thereby suspending the functions, and, by causing a congestion or stagnation of the blood in internal and vital organs, gives rise to those complications, which are so general, as to be erroneously believed by many to be the cause, instead of the effects of the disease.

Such being the nature of typhus fever, any means of cure, in order to be adequate to its purpose, must be capable of producing the following effects:—

1st. The restoration of the suspended functions.

2nd. The removal of internal congestions.

3rd. The elimination of the febrile poison from the blood.

These are the indications requiring to be fulfilled; and to determine the most desirable mode of treatment, we have only to ascertain which will with the greatest facility and least injury fulfil them.

The usual resources of the drug and stimulating treatment of this disease, are blood-letting, emetics, purgatives, diaphoretics, mercury, wine and brandy.

Blood-letting is resorted to for two purposes. First, to relieve the brain, chest, or abdomen, from the congestion which almost invariably exists, and not unfrequently excites a low form of inflammation; and second, to remove the *morbific matter* from the blood. Such, its advocates tell us, are the effects produced; but how it produces them, and to what extent, they do not deem it necessary to enlighten us.

I admit the fact, that it does to a very limited extent relieve the oppressed organs, by diminishing the quantity of blood contained in them; but must contend that it does so at the sacrifice of the strength of the patient. A great majority of the emigrants who suffered from typhus during the past summer, were persons in a state of physical weakness when attacked, with less blood in the body than the healthy standard. If one part receives too much, other parts must receive too little, and this state certainly does not call for the removal of blood, but for some means capable of equalizing its distribution throughout. As regards the second object of blood-letting, that of removing the febrile poison, it is hardly necessary to expose its absurdity. The average quantity of blood contained in a human adult is *twenty-five* pounds, and *one* pound would be considered a good bleeding in this disease. How is it possible then, by the removal of so small a quantity, to purify the blood of the entire system.

Emetics. These are given to cleanse the stomach and produce sweating, which latter they will sometimes effect by causing a determination of blood towards the skin. The first effect, that of unloading the stomach, is, in the great majority of cases, entirely unnecessary; and the second, or sweating, of rare occurrence. If emetics are followed by perspiration, good will result from their use; but as this is seldom effected, and as violent exertion without relief tends greatly to weaken and derange the system,

and to aggravate the head symptoms, the remedy is at best hazardous and uncertain, and should never be depended on while we have others not only more simple, but vastly more efficacious.

Purgatives are given to cleanse the bowels and produce an outlet for the waste and impure matters of the blood. When they have accomplished the first office, they have fulfilled the designs of nature and done all that is likely to be of service to the patient. Drug purgatives always weaken and irritate the bowels, in this disease; while milder means, such as warm or tepid water clysters, give more relief and do no injury.

Diaphoretics are medicines given with a view of inducing perspiration. The object is good, but the means injurious. Sweating by drugs is unnatural, and never gives permanent relief to the patient; even temporary abatement of the fever is seldom effected, while the agents themselves always do harm.

Mercury. This powerful medicine is supposed, by its advocates, to exert some peculiar and unknown action on the system. It is called an *alterative*, because "it alters in some way the secretions;" but *how* it alters them, is a question that many may ask, but few answer. It is this ignorance of its operations which allows it so frequently to turn against the physician who has prescribed it, and inflict serious and unexpected injury upon his patient. I have witnessed the administration of mercury in at least *one hundred* cases of typhus fever; and though I have watched with solicitous care the results, I can confidently affirm that I never saw the least benefit follow its use.

A distinguished physician of the New York hospital used to tell us, with great good humour, after going through with all the remedies recommended, and particularly *mercury*, that he could "accomplish more good with a hog'shead of Croton water, than with a whole cart-load of medicines."

Lastly. *Wine and brandy stimulants.* These appear to be the remedies most in favour with medical men in this country, and particularly in our own city, where, if I am correctly informed, they have been given, during the past season, in all stages of the disease; while the profusion of hope and satisfaction created by their short-lived and deceitful benefits, was allowed to remove from sight the unreasonable quantities permitted, the real conditions of the patients, and the almost certain ultimate result, of which the frequent visit of the *dead-cart* should have acted as a remembrancer. But this, and stranger abuses of these *medicines*, that I have heard of (which my desires would fain assure me, for the reputation of the profession, are untrue), I leave at rest, and proceed to investigate the claims of these remedial agents to our professional toleration or adoption, founded upon any mode of use whatever.

Some physicians tell us that typhus fever is a *disease of debility*, and suggest the expediency of stimulation; and hence, these, the most available for such universal prescription, occupy such an important place in the fever practice.

But we consider that stimulants, used in the early stage of this disease, are neither expedient nor proper. It is *not a disease of debility*, nor is

the body, under its power—until reduced by its continuance, as in any other sickness—in a debilitated state; but it is one of *languor* and *inaction*, as will be remembered from our previous narration of its symptoms; and this apparent impotency lies, not in the absence of muscle from the limbs or blood from the veins, or a deficiency in *passive* vital strength, but in that the febrile venom which has procured admission into the life currents, has rendered them impure and changed their nature, disappointing the various parts of the body, and particularly the brain, of their expected appropriations of *animation* and *untainted support*. The brain is fed with poisoned streams, instead of its usual pure and invigorating supplies; the cerebro-spinal axis, or brain and spinal chord, are thus injuriously affected and become deadened, stopping the flow of the nervous influence to every part of the dependent muscular machinery—thus breaking off the intercourse between the spiritual and corporeal natures of man. The blood rolls slowly, on account of its clogging impurities. The mischief is communicated from the blood to the *origin of the nerves*—those delicate lines of intelligence on which is poured out, from the sensorium commune, that strange motive power which sets so quickly to work the obedient members; and the nerves themselves unstrung. The muscles and members, although in their full possession of the same latent strength as before the disease, cannot now act with their wonted vigour. The incubus of a life, contaminated at its very fountain streams, rests heavily on the whole economy, mental and physical!

We perceive that the debility in this disease is not real. The veins are well filled with blood, and the muscular system still retains its former firmness and sufficiency. The *apparent debility* is but the consequence of the paralyzing dissemination of the typhoid virus through, and its morbid action on, every organ and tissue in the body.

Then, as there is yet left the *power of resistance*, it is very obvious that stimulation is not by any means advisable until the *evil matter* be separated from the blood; for if you quicken the flow by a temporary excitement, while it remains there, you but assist the destroyer in the spread of the deleterious influence throughout the whole circulation—you only urge on the *completion* of the patient's malady. Again, the excitement produced by stimulants at that period of the fever is unnatural, and soon dies away, leaving the economy of life more fully at the mercy of the relentless enemy, as every transient stimulation, in its *re-action*, carries away so much the more of the patient's real strength. Could you carry off the cause of fever, while you deprive the patient of his strength, there might be offered some excuse for this practice; but you only open out the powers of the body to renewed action, in order that the disease may be more certainly imparted to it, to sink again into its former languid state, but, unfortunately for the miserable sufferer, leaving the *communicated mischief* to prey more securely, as its meets with fainter opposition, upon its helpless victim. And it must appear to the reader, that the necessary repetition of the alcoholic dose, to keep up this spurious life, but further and further accomplishes the work of destruction.

In the first stage of this fever, then, the patient always does much better

when left to the resources of a conservative nature, than when roused by the artificial stimulants of the usual practice to a state of extraordinary animation, only to relapse more deeply into *depression, debility and fever.*

But although we might allow the use of stimulants in the latter stage of this disease, when the frame, though nearly freed from the febrile taint, has become completely exhausted by its efforts in resistance, still we would not admit *wine and brandy* for that purpose.

Their effects upon the fevered system may be gathered from the following facts :—

The best wine contains from twenty to twenty-five, and brandy from fifty to fifty-five per cent. of pure alcohol. They are valuable for their stimulative properties, just in proportion to their possession of this principle ; so that of the wine seventy-five or eighty, and of the brandy forty-five or fifty, per cent. of liquor taken into the system, is useless for the particular purpose of their employment, which, finding the outlets of the system closed, remains as a burden upon the economy.

Alcohol, when received into the stomach, is rapidly absorbed into the circulation. Its elements combine with the oxygen, thereby forming a compound altogether incompatible with the proper operation of the oxygen. The globules of the blood becoming thereby deprived of the vivifying principle, it loses its bright red colour, and the patient suffers partial asphyxia. And so readily does this pernicious combination extend to every extremity of the circulation, that pure alcohol has been distilled from the brain, liver, and every organ of the body, after its use. If the quantity of alcohol be large, the sanguineous system is deprived of its oxygen as completely, and the patient dies as speedily, as if left to breathe in an atmosphere altogether devoid of oxygen, or suffocate in water.

A small part of the alcohol admitted into the blood undergoes *combustion* in the lungs, and the heat thus generated increases instead of diminishing the fever.

From the preceding facts, we perceive that alcoholic stimulation frustrates the very professed object of its administration; robbing all the little vitality that is left from the diseased blood, in exchange for a moment's intoxication, with false hope. And further, that not only is this spurious stimulation sought after, regardless of its fatal after-consequences, but it is used without a thought on the fact, that its partial action in the lungs infallibly creates more heat and gains for the fever a more fatal hold upon the patient. And an idea, which, although we would gladly shun it, presses upon us with imperious power, is of this melancholy cast—that many of the poor fevered wretches of last year's mortality, whom nature herself, if allowed, would have cured, were *stimulated* by this course to the death-lethargy, till the widening grave yawned to receive them, as tributes from ignorant or injudicious practice !

There is still a further view of the subject, but which it is not important for me to press on my reader after the thoughts forced into existence by the foregoing, but at which we may glance. This is, the frequent

impurity and adulterated nature of those matters offered to the sick, under the names of "*wine and brandy*."

We are all aware, that the great demand for these noxious drinks, in ordinary life, has called into *their manufacture* all the ingenuity of clever cupidity. That the convivial toast and the wine-inspired laugh, alike with the supposed necessities of sickened humanity, are often cheated into existence by the idea of enjoyment and benefit, and fed by the use of the deadliest poisons, which only require to be a little more concentrated in their forms, in order to change, by the power of diabolical magic, the hand of unconscious friendship, that proffers them, into the *recognized hand of death*. It is an agreeable infatuation, both to the ailing and the healthy, and we cherish it. Did but a warning voice tell of its true nature and effects, the invitation or advice to partake of it would meet its just doom in deprecation and disgrace.

On the most advisable treatment to be adopted in this disease, I shall not dwell long. It is simple in its nature, though in its details and application, when employed in accordance with scientific principles and the dictates of an enlightened experience, it requires as much skill, power of discrimination and sound judgment, as any other. It consists, in addition to cleanliness, ventilation and disinfection, in varied applications of water, externally and internally. Before any benefit can be derived from internal administrations, the external outlets of the system must be opened; to the restoration of which, therefore, the whole efforts of the treatment are first directed. Cold, applied to the entire surface of the fevered body, abstracts the superfluous heat and abates the violence of the fever. This is the moment seized upon as the most advantageous for restoring the functions of the skin and kidneys, to accomplish which the body is next enveloped in a universal fomentation; and water, to dilute the blood and produce a determination towards the skin, is given at the same time freely as drink. These applications are frequently varied and repeated, and always with benefit and gratification to the patient, until free perspiration breaks out, which is kept up and rendered profuse by the frequent and continued use of large quantities of cool soft water.

Cold removes philosophically the feverish heat. Universal fomentation opens the obstructed pores of the skin, and, by producing congestion of the surface of the body, relieves the internal organs; and profuse perspiration and urination, which are generally excited within the first three days, joined to the frequent dilution of the blood by the internal use of water, aids the expulsion of the impurity from the system. Every indication is thus fulfilled without the use of one noxious agent, by the restoration and harmonious action of all the suspended functions of the economy.

It is hardly necessary to dwell on the comparative results of these two forms of treatment, after what has already been said, in this work, in commendation of one, on account of its rational and natural foundation, its kindly operations, and the wonderful and almost unhopd-for benefits which it confers on those who trust it; in contradistinction to the other,

with the well-known consequences of *its* administration. But as comparison is the only means by which those unacquainted with the various *facts* advanced by these rival systems, can judge of their respective merits, it may not be out of place to devote a few lines to a consideration of this portion of my subject, before leaving it with the public.

The results of the drug and stimulating treatment—not only as evidenced by its want of success and utter disappointment of the few feeble hopes that were vested in it, among the unfortunate and destitute emigrants, but also, as we were impressed with its inutility, when the blighting evil had seized upon respected and influential members of our own community, or we heard of its ravages amongst those whose circumstances in life allowed to this practice wide opportunities for the exercise of its curative virtues, if it possessed any—call most urgently, as we desire to avoid the repetition of such evils, for a *change*. What that change shall be, I leave to be determined by the good sense and humanity of the profession, and the vigilant carefulness of those in whom our citizens have placed, to such an extent, the disposal of their health and lives.

In taking this view, it ceases to be surprising that medical men, in attempting to resist its progress by a treatment founded in error, and practised almost without hope of success, should so readily give themselves up to despair on being attacked by it. This fact proves, perhaps as strongly as any can, their consciousness of the inefficiency of the remedial means generally adopted, and may be brought forward as another reason why *we should try any other means holding out a better prospect of success*.

It has been my privilege to witness the use of stimulants, purgatives, emetics, mercury, &c., in a great number of cases, under the advice and direction of the able physicians of the New York City Hospital, and I can confidently aver, that nearly *one half* of the really dangerous cases *died*. In many instances, whole families were cut off, one member after another, and that too where no previous constitutional taint existed, nor anything unusual in the symptoms, to account for this dreadful mortality; nor in the treatment either, unless we believe with the late Dr. Cheyne, of Dublin, that “with many an unfortunate emigrant, the immediate cause of death was *not* fever, but *intoxication* during the fever—while all who *escaped* were supposed to owe their recovery to *wine*!”

It may be argued, that hospital reports do not shew the mortality to have been so great; but hospital reports are not in general the best criterions by which to judge of the success of any form of treatment. All the cases admitted to the hospital, are reported; while generally *one third*, and frequently *half* of the admissions, require little more than shelter, rest, and sufficient food and drink, for a week or ten days, to enable them to overcome the fatigue of their wearisome and distressing voyage; and would recover more speedily out of the wards of the hospital, and without medicine or alcoholic stimulants, if allowed the same comforts in other respects.

In my own practice—which I admit has not been as extensive as that

of many others, but still sufficiently so for all practical purposes—the results of the water treatment have been highly satisfactory.

Of *sixty-one* cases treated by me, forty-four of them in the country and the remaining seventeen in private practice in this city, *not a single death occurred from the fever*; and the loss of the only patient among them, was owing to imprudence while in a reduced state, yet recovering from the fever, which imprudence brought on complicated relapse. The duration of the complaint was in most cases shortened, delirium *always controlled, and the appetite and digestive powers of the stomach restored after the first few days.*

The experience of Dr. James J. Hunter, of Newmarket, acquired not only in his attendance at the emigrant sheds in that village, but also from his private practice, fully corroborates these statements, as will be seen by reference to his opinions on this subject in a preceding part.

And now, in conclusion, I think it useless to re-echo the loud call, which *not the few remarks* I have made, but facts of the most impressive character, and that have numbered themselves by *thousands* around us, have with their startling voices raised in reprobation of the ineffective efforts of the medical profession in their opposition to this dreaded visitant of our land. These—addressing themselves to the deeply-interested and unprejudiced judgment, and energetic action, of every worthy citizen and inhabitant of our province, in whose hand is placed any power—ask this simple question, Should not our hospital directors exchange a useless practice for one that is both rational and proved to be successful in fever treatment, and that at once?

And now, I would only remind all who feel themselves involved in this matter, that neither our country nor our country's God will hold those morally guiltless, who either at the shrine of indolent procrastination, or the pompous altar of unbending egotism, dare any longer to officiate in the dire sacrifice of the numbers of our fellow-beings who are marked to appease the rapacity of the pestilential monster—those who either *ignorantly or criminally frustrate the attempted rescues of Nature, and then charge her with the fatal results!*

FINIS.

ROBERT HUNTER,

PHYSICIAN AND SURGEON,

Residence—CHURCH ST., NEARLY OPPOSITE THE CATHOLIC CATHEDRAL.

Office—CORNER OF YONGE AND RICHMOND STREETS.

Finding great annoyance as well as loss attend the collection of small debts, scattered over the country, I subjoin the following tariff of fees, for the information of those visiting the city for medical advice.

I am induced to take this course, from the frequency of requests to credit persons totally unknown to me, and residing at a distance in the country, as well as from a conviction that a system of credit benefits neither party, while it invariably entails trouble on both.

Persons in indigent circumstances, whether of town or country, known to myself, or bringing credible evidence of their inability to pay a fee, will at all times be entitled to advice gratis, and also to regular attendance, if necessary; but in no other cases will the following fees be varied.

1. For full investigation of a case of chronic disease, with written advice and prescriptions, 25s.
2. For full investigation, &c., with verbal advice, 15s.
3. For advice, &c., when subsequent treatment is required, 10s.
4. For the operation of *strabotomy*, for the cure of *strabismus*, *squinting* or *cross-eye* (guaranteed), 5l.

In the treatment of all acute diseases, requiring attendance from the first, no charge for advice will be made; but the usual fees established by custom will be adhered to.